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Genesi Market Opportunities for RCP System in China

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Executive Summary

Genesi's latest system platform for electronic devices has high potential in the Chinese consumer market. While many possible use cases have been considered (see Appendix B), tablet computers were found to have the best combination of technological fit and profitable market outlook. The Chinese tablet market is projected to reach 27 billion U.S. dollars in 2014. In order to compete with high-quality international brands while maintaining their middle pricing strategy, Chinese tablet brands must overcome various barriers in order to elevate their product quality. Genesi's design offers solutions for these rising, increasingly-respected Chinese firms, which are the recommended license partners for Genesi.

The latest system incorporates brand new technology, known as Redistributed Chip Packaging (RCP), from Freescale Semiconductor. The benefits of this technology include significant reduction in the overall system size, which has been discovered as a valuable selling point to manufacturers in the Chinese tablet market (see Appendix E). This reduction in size allows tablet makers to improve the user experience by adding in needed features, improving stability through heat regulation, slimming the tablet's form factor, or increasing battery life. Additionally, Genesi adds value through its Aura Platform by streamlining the process of integrating hardware with software. Aura allows implementation of any application software or additional hardware elements that a partner may desire, with minimal development time and cost. By licensing Genesi's design, a partner can improve product quality, save development cost, and take advantage of new opportunities to improve their product's user experience.

This package's greatest disadvantage in China appears to be the reputation and methodology of Freescale. To navigate this roadblock, it is recommended that Genesi maximize its own role and minimize the Freescale name when marketing their product. To overcome the subpar appearance of Freescale's specifications, Genesi should pursue a partner with a strong brand name, who does not merely follow trends or market their products based on specifications (see Appendix C). Companies like Meizu and Huawei have some ability to define market demand.

A major concern when considering China as a destination for Genesi's services is the protection of intellectual property. Three key factors are especially important if Genesi is to enter a license agreement with a Chinese company. First, Genesi should pressure Freescale Semiconductor to sell this RCP package exclusively to Genesi's license partners. Next, Genesi should attempt to invoke Hong Kong or United States law when signing a license agreement with a Chinese partner. Finally, local law and auditing support should be employed for the design and implementation of an effective license agreement.

Staying cautious of potential dangers and limitations, Genesi can multiply the profitability of its technology by pursuing the growing Chinese tablet market.

Strategic Plan/Company Overview

With the emergence of a strong middle class, the average Chinese expendable income per person tripled between 2003 and 2011.¹ More consumers are accessing the internet than ever before, opening the floodgates for the sale of “smart” electronic devices. With 240 million smartphones and tablets in use, this year China surpassed the U.S. in number of smart devices.² This Chinese market holds opportunities well worth pursuing for Genesi with its innovative technology.

In 2014, tablet computers are expected to sell in China for revenues totaling \$27 billion U.S. dollars (USD).³ Tablet companies that are dominating the market can be categorized as international brands or white box manufacturers. International brands like Apple and Samsung are the leading technology innovators, and they sell high-quality tablets at a high price. White box manufacturers, who lack a recognizable brand name, sell inferior products at a low price; they market tablets purely on specifications.

As the Chinese government attempts to shift dependence away from export-led growth and toward domestic consumption, much attention has been given to Chinese tablet brands attempting to compete in quality with international brands. In order to take market share from respected names like Apple or Samsung, Chinese brands must offer comparable quality at a middle price point between that of white box products and international branded products. This is a difficult role to play, and Chinese brands struggle to provide the quality expected of them.

When developing a new product, current options for Chinese tablet brands include in-house research and development (R&D), or the implementation of a freely available reference design with minimal research and development. In-house development can be effective, but it requires a great deal of time and money, as well as a strong base of human resources. Often, Chinese brands do not have sufficient resources to create a high-quality product through in-house R&D. Other Chinese brands use simple hardware reference designs obtained online, as well as free Android software, thus cutting costs and maximizing profit margins. These reference designs lack the quality and application-specific optimization offered by the in-house design process.

Chinese brands have a need for quality designs at a reasonable price. Genesi can provide a premium design that is optimized to the partner’s specific needs, bringing them to the next level of quality.

Genesi specializes in systems integration and has had success in the past with solutions for workstations, netbooks, and tablets. Genesi’s latest system utilizes new packaging technology known as redistributed chip packaging (RCP). As the first to market with this technology, Genesi provides a partner with significant opportunities for differentiation. Genesi’s full system is designed to enable extreme

flexibility for a Chinese brand, enabling them to economically create final products that offer quality and functionality. Through its unique Aura Platform, Genesi reduces the cost of developing a quality product by streamlining the process of software and hardware integration.

Strategic Milestones

In the technology market for tablets and similar products, a product life cycle is essentially finished within 12 months. Therefore, Genesi's strategic milestones are shorter-term than those of companies in other industries. However, Genesi's long-term plans include continued development of RCP-based systems, and the introduction of RCP technology to additional markets. Short-term goals that will determine the success of Genesi in the next two years include: finding a Chinese tablet manufacturer to license the current RCP, increasing brand recognition for Genesi in China, developing the next RCP-based system, and pursuing additional markets for the RCP in Asia. Intellectual property must be protected proactively while pursuing all of these goals.

Products/Services and Technology Roadmap

Product/Services Overview

The emerging Chinese brands are facing barriers in regards to elevating themselves and the quality of their products to the levels of the established international brands. These barriers within the Chinese tablet market include needs on both the consumer and manufacturer levels. Through market research conducted in Shenzhen (Appendix E), an international electronics hub, five growing areas of need were identified. These five areas are the lack of essential features, the trend towards thinner devices, insufficient battery life, instability due to overheating, and a poor user experience. If Chinese brands can meet these growing needs, they can elevate the quality of their products and capture a larger portion of the \$27 billion tablet market.

Additionally, demand has grown for an all-purpose device that provides the user with the ability to watch movies, play games, access social networking, and even make phone calls. These needs have culminated in the demand of an all-purpose device at a size of approximately 7 inches (Appendix E). This size allows for easy portability while maintaining a display size that allows for an immersive user experience. For Chinese tablet manufacturers, along with this trend comes the challenge of providing the demanded functionality while reducing the overall size.

Genesi's system provides flexibility through hardware size reduction, allowing a Chinese brand to eliminate the barriers standing in the way of achieving a premium-quality product. Genesi provides to its customers the fruit of a thorough design process: selection of various hardware components, designing of a printed circuit board (PCB) which incorporates these components in a space- and energy-efficient manner, and engineering of a software package that forms a flexible platform. Upon this platform, a license partner can easily implement any desired application software or operating system.

For its latest design cycle, Genesi has chosen to implement the new RCP technology developed by Freescale Semiconductor. This RCP package includes a Freescale i.MX6 processor, integrated together with flash, random access memory (RAM), as well as an integrated circuit for power management. This combination of essential components into a single chip allows for a dramatic reduction in the number of interconnections on the PCB. Thus, the full system can be significantly smaller than is normally possible.

The reduction in size of the PCB will allow Chinese brands to eliminate barriers by creating extra space inside the tablet shell. This extra space allows the freedom to expand the system with features such as wireless cards, subscriber identity module (SIM) card readers [for 3/4G connectivity], universal serial bus (USB) peripherals,

touchscreen keyboard adapters, and numerous other features. Additionally, the space can be used to install a larger battery and solve the need for longer battery life. Furthermore, it is understood that extra empty space within a tablet shell can be used to dissipate heat more quickly, preventing frequent reboots of the device and improving overall stability. Finally, extra space can be used to redistribute the tablet components, creating a thinner device to match the growing trend.

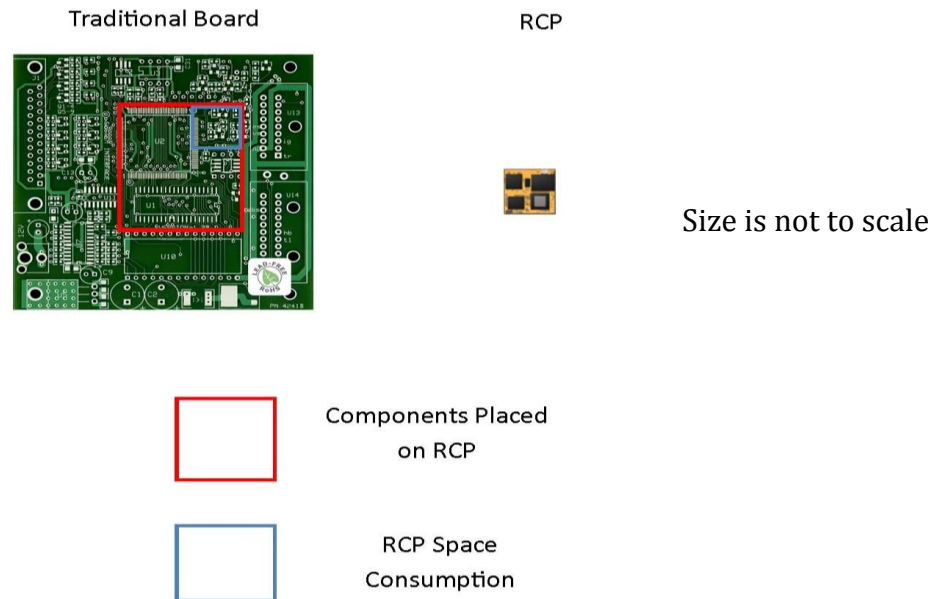


Figure 1. Illustration of Size Decrease Through RCP

Chinese tablets such as the Huawei MediaPad 10 and the ASUS MeMo Pad 7 suffer from a poor user experience, characterized by lagging, frequent crashes, and insufficient support for third-party applications.⁴ These common detractors of the user experience evidence a poor fit of software together with the tablet hardware. They serve as another barrier preventing Chinese tablets from competing in quality with internationally-branded tablets.

Together with the board, Genesi includes their custom firmware and hardware abstraction layer called the Aura Platform. This platform is a major factor differentiating Genesi from other companies that create board designs for consumer electronics. Aura allows for a very streamlined process of integration between the hardware and any operating system that the manufacturer may want to install. If the manufacturer would like to add components to the board, the Aura Platform will allow the software to easily adapt to these added components.

The integration which must take place can be illustrated, in a simplified way, as puzzle pieces fitting together. In order to design a full tablet device that achieves a smooth user experience, software and hardware must be created so they fit together perfectly, like two puzzle pieces. As an abstraction layer, the Aura Platform can be

illustrated as a moldable piece which fits the hardware and software pieces together, no matter their differences; this analogy is shown in Figure 2. The resulting perfect fit between hardware and software can eliminate the problems encountered by many poorly-integrated devices. By using a premium abstraction layer like Aura, a Chinese tablet maker can greatly improve their tablet's user experience, at a minimum cost of time and money in development.

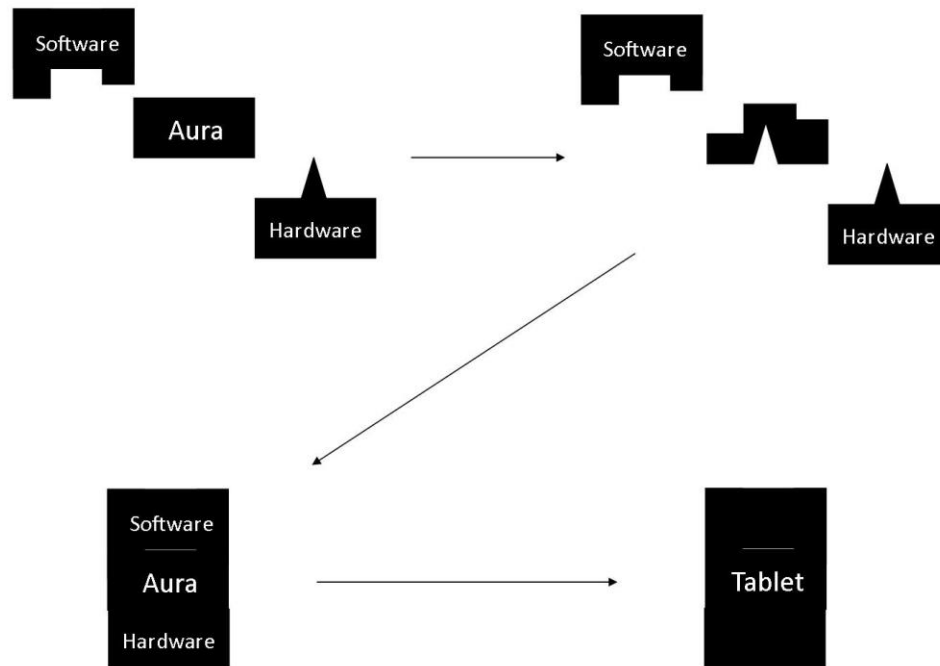


Figure 2. Aura Platform Simplifies Software/Hardware Integration

Specifically, the Aura Platform executes drivers at the basic input/output system (BIOS) level, as well as BIOS-level emulators which adapt hardware components with whatever software the manufacturer may want to implement. Consequently, board and software development can be done separately. This flexibility opens new opportunities for a Chinese brand to differentiate their product.

While most Chinese tablets ship with a standard, stripped-down Android operating system, Aura enables smooth implementation of alternative operating systems, such as Ubuntu. As the Chinese government recently signed a contract designating Ubuntu as the official operating system of China,⁵ the flexibility to be a “first mover” may prove valuable for a Chinese brand.

Since Aura takes the drivers from the operating system and runs them at the firmware level, implementing software updates for the operating system becomes very simple. The advantage of continually improving the customer's user experience through software updates is one not offered by many Chinese tablet manufacturers. Genesi can provide this ability, elevating the reputation of a Chinese brand as one that supports its customers.

Genesi offers full support to its partners, including documentation to assist in establishing an effective, streamlined manufacturing process. Genesi's license partner will have access to technology not even available to the established international brands. The solutions Genesi provides will level the playing field, opening new doors for a Chinese brand to elevate the quality of their products.

Intellectual Property

Intellectual property (IP) protection by law in China is almost nonexistent. With a product as unique as Genesi's RCP platform, doing business in China presents many risks. There are four categories of intellectual property with which Genesi must be concerned: name trademarks, RCP design, PCB design, and software.

First, Genesi's name should be protected with a trademark. However, currently the Genesi name is not trademarked and the Aura Platform holds an unregistered trademark. It is recommended that Genesi pursue trademarks to protect the Genesi and Aura Platform names in China and everywhere else.

Although Genesi does not possess any patents of its own, patents owned by a company called EPIC protect some of the design principles used to create RCP. This company licenses these patents to Freescale Semiconductor, which then designs and manufactures the RCP hardware to be implemented in a system by Genesi. The question of whether non-licensees of Genesi's design may purchase the RCP from Freescale is essential to this IP analysis. If Genesi hopes to minimize the danger of third parties taking advantage of their technology, it is strongly recommended that Genesi push Freescale to disallow the purchase of this RCP chip by non-license partners. Alternatively, danger can be slightly mitigated by pressuring Freescale to closely monitor who purchases large quantities of the RCP chip, so that damage control is possible should an incident occur. However, the remainder of this IP analysis will assume that the RCP module may only be purchased from Freescale by Genesi's license partners.

As for the PCB design on which Genesi implements RCP, no protection can be provided via trademarks, copyrights, patents, or trade secrets. The board can be easily reverse-engineered and mirrored. However, the PCB design is only valuable together with the RCP module provided by Freescale Semiconductor. It is assumed that the RCP module may only be purchased after partnering with Genesi, so the board design provides little utility to third parties.

Genesi's most valuable intellectual property is the copyrighted software implemented in its systems. However, as the RCP will ship with this software already uploaded, this IP can only be accessed in China in the form of a binary image. Access to the binary image requires complex methods for extracting code, and Genesi has added safeguards within the software to prevent this. If the binary were ever to be accessed, however, a registered copyright will prohibit any unauthorized use of this binary image. It is recommended that action be taken as soon as possible to register this copyright, allowing Genesi to take legal action if the software is stolen in China and somehow gets back to the United States.⁶

The binary software image is very difficult to reverse-engineer. It is reasonable to ignore the possibility of a hacker determining the methodology behind the Aura Platform by merely looking at a binary stream of 1's and 0's. The binary image is only useful given the exact electrical circuit printed onto Genesi's RCP-based PCB. Therefore, the only way an outsider can implement the stolen software image is by fully reproducing Genesi's system or its electrical equivalent. One must obtain the RCP from Freescale (which, it is assumed, is not possible for non-licensees), reverse-engineer and recreate Genesi's board design, and finally extract the binary software image and run it on this reproduced hardware. Only then could a third party reproduce and sell Genesi's system without paying license fees.

Another important consideration is how Genesi might protect itself from any sort of misbehavior by its Chinese licensee partner. There are a large number of scenarios by which a partner could attempt to take advantage of Genesi, but this number may be significantly decreased through a few safety measures. It has already been recommended that the RCP only be sold to Genesi's license partners. In addition, Genesi should request that Freescale assist with the license auditing process by accounting for the RCP units shipped to each licensee partner. This may prevent a partner from producing and selling additional units under the table using Genesi's design.

When considering business in any other nation, one must consider whether the rule of law in that nation is strong enough to successfully prosecute a misbehaving company in their native country. This question is essential in China, where respect for intellectual property is low and there is a well-known history of government corruption. Corporate ties to the government are common and often invisible. As such, it is recommended that when writing the license agreement, Genesi push to invoke the law of a system other than that of China. Although using the United States' system would be optimal for Genesi, invoking Hong Kong's law system may be a reasonable requirement in the eyes of potential licensees and will offer far more protection than the Chinese law system.

Even in Hong Kong, for law to have any bearing on a company's decisions, the right type of licensee must be selected. It is recommended that Genesi limit its license partners to those companies that have a strong reputation to be protected. A

company that seeks to be internationally recognized will be expected to adopt international standards in terms of IP. Genesi should pursue a license partner that clearly has something to lose by violating an agreement. An international IP scandal, in addition to being very expensive, can do much to dissuade other corporations from doing business with a misbehaving licensee (Appendix E).

It should be emphasized that a partner who truly competes for market share will see it in their own best interest to protect their own intellectual property. To reinforce this notion, Genesi should market its system as the unique and innovative technology that it is. Genesi should appeal to a license partner's ego as the only Chinese company with access to the brand new RCP technology. With respect to external dangers, Genesi can require that the licensing partner must take legal action if Genesi IP gets out into the market. It is important for this to be written into the licensing agreement. Additionally, Genesi should include a clause stating that a fixed percentage of all the damages recovered in such a suit be allocated to Genesi.

A strong contract formed through a qualified Chinese lawyer will help keep the partner in check. The contract should contain some legally-binding terms for compensation in case of a breach and a term to return or destroy all technologies at the end of the contract/licensing agreement. This contract formation through a lawyer should cost somewhere around \$5000 USD.

In order to make sure that appropriate per-unit royalties are being collected, a qualified Chinese license auditor should be hired. The cost will vary by volume of sales, duration of contract, and calculation complexity. Keeping a local eye on the partner's activity is essential to ensure that Genesi is compensated properly for the use of their valuable intellectual property.

One final acknowledgement should be made regarding export control laws. Genesi should take care to comply with International Traffic in Arms Regulations (ITAR), Export Administration Regulations (EAR), as well as regulations from the Office of Foreign Assets Control (OFAC). Certification must be obtained through the ITAR and EAR form I-129 in order to avoid penalties for the unauthorized export of ideas.

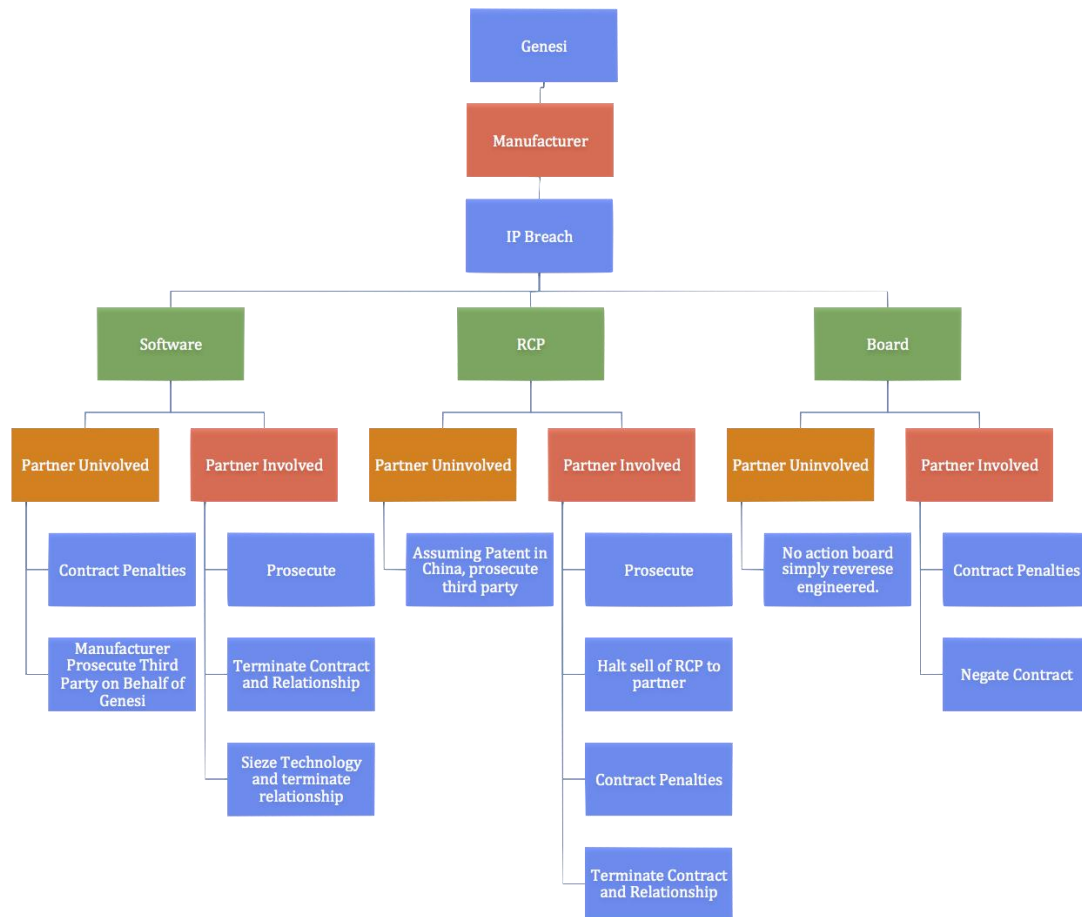


Figure 3. Intellectual Property Mitigation Plan

Any successful IP protection plan should include a plan of mitigation for the case that things go wrong. Figure 3 illustrates the mitigation plan for Genesi and the manufacturing partner. The flowchart demonstrates the various avenues of mitigation that can be chosen should Genesi's relationship with the partner encounter trouble. The three green blocks in the diagram represent the three key parts of IP that must be protected. If any one of these three areas experiences a breach in IP, Genesi then follows the mitigation under the red blocks or orange blocks, depending on whether the partner was involved in the breach.

Here is an example of the way that the flowchart helps Genesi understand their possible actions. Consider the scenario that one of the partnering firm's employees gives away the binary code of the software to a third party. Genesi first establishes that there was a clear breach of IP, then determines that the breach was in the realm of software. The employee of the partner creates partner involvement Genesi now follows the red path and finds that the possible courses of action are: prosecute the

partner, terminate the contract and relationship, seize technology, and finally enforce contract penalties.

Genesi must be proactive about their IP protection if they are to form a licensing agreement in China. It is most crucial that Genesi find a partner that has a strong brand reputation and that is willing to sign a contract outside of China.

Technology Roadmap

Genesi's first RCP-based system, currently in development, already offers benefits that are as of now unavailable to Chinese consumer electronics companies. The potential is virtually limitless for the development of this technology in the near future.

Although the technology is currently recommended for use in tablet computers, development of the next generation of Genesi's RCP can be angled in many possible directions. Genesi's next technology could be successfully applied to smartphones, set top boxes, or wrist-worn electronic devices. An example flow chart which maps Genesi's near-future development efforts is shown in Figure 4.

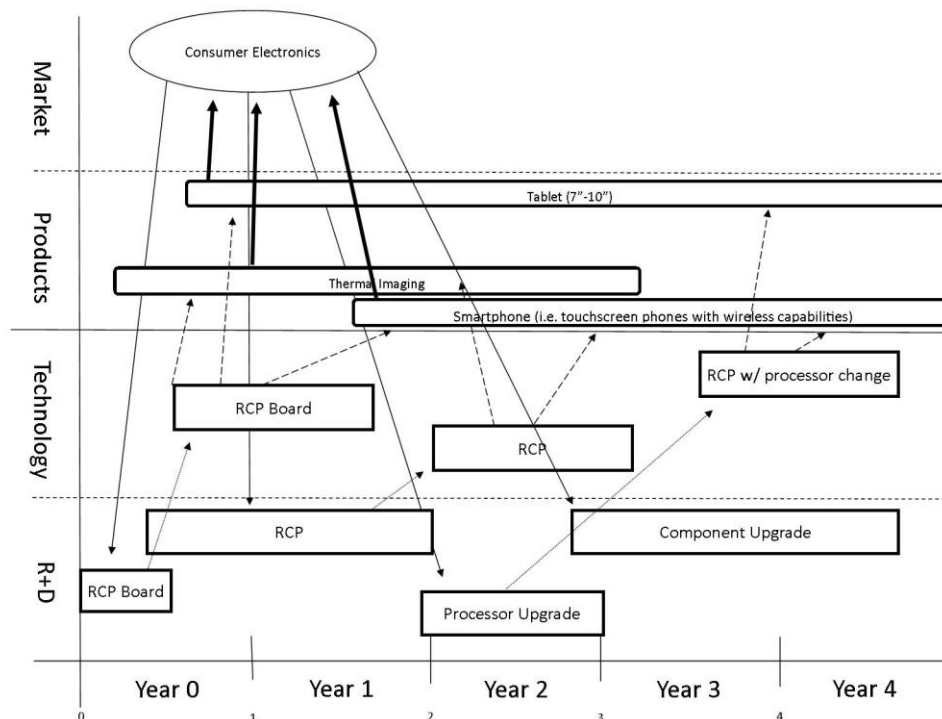


Figure 4. Technology Roadmap

Market Analysis and Sales Plan

Customers

The ideal customer for Genesi is a tablet manufacturer who is ambitious to cash in on the 27 billion USD tablet market in China by improving the quality of its products, providing a better user experience to its customers.

The majority of the revenue within the Chinese tablet market is taken by manufacturers within two categories: international brands holding a differentiation advantage, and white box brands holding a cost advantage.

International brands like Apple and Samsung dominate the tablet market, and are extremely popular among consumers. These companies hold renowned reputations, providing high-quality products with a stable and smooth user experience. However, Genesi's services do not fit most companies in this group. Large, international brands typically employ a business model with a high degree of vertical integration. These companies perform their own research and development, and they hold great pride in distinguishing their unique designs from others. When these companies do consider outsourcing R&D, they mostly choose partners with well-known brand names. Since Genesi is new in the Chinese market, it lacks brand recognition in China that could attract these larger companies to do business. Thus, Genesi should search elsewhere for a partner that is open to outsourcing R&D.

Customers buy tablets from low-end white box manufacturers based purely upon specifications and price, with little to no consideration of the company that designed or manufactured the product. This type of brand may not be Genesi's best partner, either. The first reason that filters them is the consideration of cost: as an advanced technology, RCP will not be the cheapest hardware available on the market. Since this type of company maintains very low profit margins, normally they are not equipped with strong financial capability to make an investment in new technology. White box companies have their priorities elsewhere, as they are typically the followers rather than the innovators. Secondly, there are few incentives for small white box companies to uphold a contract, as they have little to lose through a lawsuit; if legal action is taken, they can even abandon one company name and start a new company with a new, spotless reputation. Genesi must search for a partner that places higher priority on quality and innovation.



Figure 5. Choice of Customers

As shown in Figure 5, the profile of a qualified partner is now narrowed down, bringing attention to another group within the tablet market. In this category are the Chinese brands situated in the middle layer of the market, providing a mix of high quality and low price. These companies struggle to obtain market share from both the low-end and high-end market segments, but too often they are unable to deliver a superior balance of quality with respect to price. Companies in this dilemma, such as Huawei and Meizu, could be potential partners for Genesi. As mentioned previously, there are many barriers preventing Chinese tablet brands from matching the quality of international brands: lack of features, low battery life, thickness, instability, and poor user experience. Genesi's RCP and Aura technologies can provide the solutions to these problems, enabling a partner to elevate their brand name.

Although these companies may also perform in-house design, because of their struggle they may be open to cooperation with Genesi in order to obtain a bigger piece of the \$27 billion pie. These Chinese brands are equipped with the financial capability to license more advanced technology, as well as the economies of scale required to produce in high volume. Compared with white box manufacturers, they depend more on their brand names than on specifications to sell products. The value of Genesi's technology is maximized through a partnership with a Chinese brand.

Marketing Plan

In order to make themselves attractive partners for the selected Chinese tablet brand, Genesi must carefully consider how to package their image. First impressions are especially crucial since Genesi's name is not well known.

Market research in Shenzhen revealed that Freescale, Genesi's chip supplier and the designer of RCP, has a poor image among Chinese manufacturers. Comments by manufacturers indicated that Freescale has a development cycle which is incompatible with the Chinese market. Whereas Chinese chip manufacturers such as Allwinner and Rockchip develop new processors very frequently, Freescale implements a "less is more" strategy by releasing high-quality products relatively infrequently. With its location in the United States, Freescale also is unable to respond to customers' questions and requests with the same speed as companies located in China. Another complaint from Chinese manufacturers relates to costs: due to government subsidies on their R&D, Chinese chip companies are able to continually lower their chip prices during their products' lifecycles. In contrast, Freescale's chips, though less expensive than most other American chipmakers, are offered at a higher price. Chinese manufacturers indicate that these characteristics are unattractive in the quick-paced, low-margin Chinese electronics industry (Appendix E).

It is understood that at the current time, Genesi is still negotiating with Freescale as to the specific arrangements of their RCP partnership. Because of the factors mentioned above, it is recommended that Genesi insist on selling the RCP as a Genesi product, without overtly referencing Freescale as a designer of RCP. Freescale's name will inevitably come up in negotiations with any potential partner, but any negative effect will be minimized if Genesi is seen as the driver of the Freescale-Genesi alliance, with the power to push Freescale for solutions at the request of a Chinese partner. Finally: upon release of an RCP-based tablet product, Genesi's action of minimizing the recognizable but negative name of Freescale will allow the Chinese partner to maximize the credit given to their own brand name for the successful product.

Establishing Genesi's credibility with a Chinese partner will certainly be a challenge, but this can be done by shamelessly proclaiming Genesi's experience, previous big-name partners, and major contributions to the open-source software community.

With the exception of leveraging already-made connections to executives within a Chinese brand, the best way to initiate a business relationship with potential Chinese partners is through participating in the Chinese electronic fairs (Appendix E). A major function of these exhibitions (e.g. *China Electronics Fair* on November 13 and *China Hi-Tech Fair* on November 16) is to initiate technology exchange between companies. By reserving a booth to demonstrate its new technology, Genesi will have opportunities to meet and connect with potential partners. Genesi

may also request to participate in special forums to display their technology, giving RCP a respected image among other companies at the fair. At fairs such as these, Genesi can benefit from other connections that may provide additional insight on the Chinese markets and manufacturers.

If Genesi hopes to have increasing opportunities within the Chinese market in the future, it is recommended that Genesi begin putting their own brand name on any tablets made with their design. By negotiating in the contract agreement to put a label on every product sold – similar to the “Intel Inside™” sticker seen on many personal computers – Genesi can win positive brand recognition among both companies and consumers.

Competitive Analysis and Alliance Partners

Competitive Analysis

Together, Freescale and Genesi deliver a chip uploaded with software, a full PCB design, documents assisting with the manufacturing process, and more. Thus, the Freescale-Genesi partnership is competing with any alternative combination of a chip manufacturer with a circuit board designer.

Competitors can be split into three categories:

1. Tablet brands' own R&D departments, which produce everything in-house
2. Chip manufacturers which produce the processor and also provide free online circuit board reference designs
3. Design firms which assist tablet brands with the development process

International brands like Apple and Samsung have well-established R&D departments, supported by sufficient capital to create innovative and high-quality products. Some Chinese brands share this advantage, but generally the in-house developers for Chinese tablet manufacturers are less knowledgeable and have fewer resources than international brands. If a Chinese brand can be fully convinced of Genesi's expertise, the company may be willing to break the momentum of its in-house developers and add a middle-man.

Companies like Allwinner or Rockchip form the second type of competitor. In order to sell the chips they produce, these companies often create a circuit board reference design and offer it online as a free resource for the tablet manufacturer. This attracts tablet makers to use or modify the free design, allowing them to react to the market quickly without heavy investment in R&D. However, the free reference designs are very basic and general. They are not an appropriate choice for the manufacturer looking to produce a tablet that is distinguished in the market. Genesi can offer a design that is of far higher quality and more optimized for the end application, but this will cost significantly more money.

These two alternatives to licensing a Genesi design are shown in Figure 6.

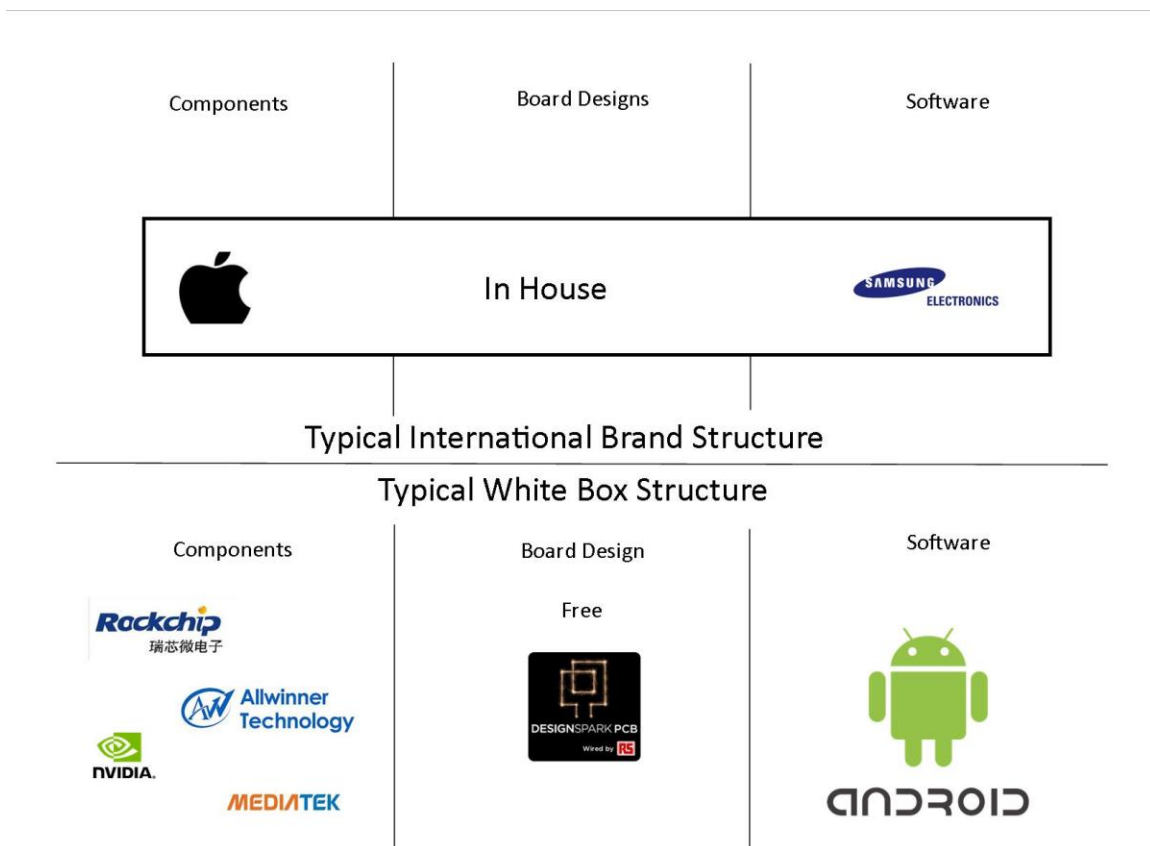


Figure 6. Alternatives to Using Genesi for R&D

A direct competitor to Genesi would be the company that creates a reference design and licenses the design to a tablet manufacturer, such as Thundersoft. Genesi also fits in this category.

With respect to all of these competitors, Genesi has the advantage of being the first to offer innovative technology – RCP and the Aura Platform – that is not available elsewhere.

Alliances

Genesi has formed a strategic alliance with Freescale in order to develop an optimized RCP design. Without Freescale, Genesi would not have access to the highest level of integration in computer chip processors. Genesi will continue to use Freescale in conjunction with their services to the Chinese partner.

The alliance of Freescale is an advantage for the Chinese partner, as well. Freescale's business model involves designing products according to the requests of its partners, including Genesi. Through Genesi, a Chinese tablet manufacturer can have more control of the chip development than they would by using a fixed-specification, off-the-shelf chip from another silicon vendor.

Operations and Management

Operational and management plans to support Genesi's license agreement in China remain relatively simple. Naturally, a Genesi representative must travel to China to negotiate with potential Chinese partners and to close the deal. Once a purchase decision is made, Genesi will need to hire a lawyer local to the region in which the license agreement will be signed. The contract must be carefully written to effectively protect both Genesi and the partner.

Also, American legal help should be consulted regarding export regulations, as laid out in ITAR and EAR.

As mentioned previously, an auditing agent will be needed once the technology is put into use, to account for license fee collection.

Genesi has established a precedent of support to be shown to its license partners. As with previous license agreements, Genesi will stand by to provide necessary technical support to its partner. Meanwhile, Genesi will continue its development work and may be able to offer updates and upgrades to the Chinese partner. This will enable Genesi to build a lasting relationship with its manufacturing partner.

If Genesi is able to empower a Chinese partner to create a successful RCP-based product, a host of new opportunities will open in China. As Genesi develops brand recognition among manufacturers in China, Genesi may need to consider planting a team in China in order to provide support and to stay in tune with the Chinese market and trends.

Financial Plans

P&L Summary

Licensee Profit & Loss Statement			
	Scenario 1: <u>0.5%</u>	Scenario 2: <u>1%</u>	Scenario 3: <u>3%</u>
Revenue	\$53,750,000.00	\$107,500,000.00	\$322,500,000.00
Cost of Goods Sold	\$35,851,250.00	\$71,702,500.00	\$215,107,500.00
Royalty on per unit sales	\$2,150,000.00	\$4,300,000.00	\$12,900,000.00
Gross Profit	\$15,748,750.00	\$31,497,500.00	\$94,492,500.00
Operating Expenses			
Research & Development	\$5,375,000.00	\$10,000,000.00	\$10,000,000.00
Up front Royalty	\$500,000.00	\$500,000.00	\$500,000.00
Marketing	\$3,000,000.00	\$3,000,000.00	\$3,000,000.00
Sales	\$1,075,000.00	\$2,150,000.00	\$6,450,000.00
General & Administration	\$1,612,500.00	\$4,300,000.00	\$12,900,000.00
Total Operating Profit	\$4,186,250.00	\$11,547,500.00	\$61,642,500.00
EBIT	\$4,186,250.00	\$11,547,500.00	\$61,642,500.00
Interest			
Taxes	\$1,046,562.50	\$2,886,875.00	\$15,410,625.00
Net Income	\$3,139,687.50	\$8,660,625.00	\$46,231,875.00

Table 1

As shown in Table 1, three scenarios for the licensing partner are represented. These scenarios denote three possible levels of captured market share in China. The highest and lowest market share scenarios are derivative of the 2012 China market shares of two electronics companies, Samsung and Ramos, respectively. The revenue numbers are derived from a projected \$27 billion Chinese tablet market in 2014.

Cost of goods sold was estimated using the bill of materials (BOM) and manufacturing cost of a Nexus 7 tablet, found from an Information Handling Services (IHS) Isuppli teardown.⁷ Also taken into account was a small additional cost to account for the increased price of RCP. Furthermore, the per-unit royalty fee as well as the up-front licensing fee is based on past Genesi partnerships, regarding similar products. Finally, the Chinese corporate tax rate is a flat 25% tax.

R&D is based off of a Huawei case study stating that Huawei spent 10% of revenue on R&D in 2012. Using this 10% estimate, a threshold was set for R&D at \$10 million. A partnership with Genesi will directly affect this number, reducing the R&D cost. Marketing was estimated from a 2011 quarterly report for Huawei. The marketing expenses for Huawei were \$1.1 million for the quarter. It is estimated

that the project marketing expense cannot reasonably exceed \$3 million. The Huawei case study stated that the sales and administration costs for Huawei during 2012 was 6% of their revenue. 2% of the revenue was separated for sales and 4% of the revenue for G&A. Interest is assumed to be irrelevant for the sake of this project. It is assumed that the partner would have the capital necessary or would be able to acquire the necessary capital. Taxes are set at the Chinese corporate tax rate of 25%. This is a flat tax rate that is universal in China and is applied to all corporations.

Genesi Profit & Loss Statement			
	Scenario 1: <u>0.5%</u>	Scenario 2: <u>1%</u>	Scenario 3: <u>3%</u>
Revenue	\$2,650,000.00	\$4,800,000.00	\$13,400,000.00
Cost of Goods Sold	\$-	\$-	\$-
Gross Profit	\$2,650,000.00	\$4,800,000.00	\$13,400,000.00
<u>Operating Expenses</u>			
Research & Development	\$1,500,000.00	\$1,500,000.00	\$1,500,000.00
Marketing	\$-	\$-	\$-
Sales	\$225,000.00	\$225,000.00	\$225,000.00
General & Administration	\$200,000.00	\$200,000.00	\$200,000.00
Total Operating Profit	\$725,000.00	\$2,875,000.00	\$11,475,000.00
EBIT	\$725,000.00	\$2,875,000.00	\$11,475,000.00
Interest			
Taxes			
Net Income	\$725,000.00	\$2,875,000.00	\$11,475,000.00

Table 2

Table 2 shows the profit and loss summary for Genesi. The three scenarios in this table represent the same three scenarios as shown in Table 1. Additionally, Genesi's revenue is derived from the initial \$500,000 licensing fee plus a \$10 per-unit royalty fee on the licensing partner's unit sales for each scenario. The \$10 royalty used is from a past licensing agreement Genesi made for a similar product. Naturally, this royalty fee may be adjusted if the need arises in China.

R&D expenses for Genesi are related to the development of the platform. Since this platform has already been used for at least one license agreement in the U.S., development costs directly related to a license agreement in China are difficult to estimate. The estimate given is simply of the right order of magnitude for R&D.

Genesi marketing costs are relatively minimal due to the nature of their business model. Genesi sales would cover the expenses related to signing the licensing agreement, including: plane flights, entrance fees for electronics fairs, hotel accommodations, the hiring of sales person to set up and sign the contract, and the hiring of translators. The sales person will most likely be involved in the formation

of an agreement for 2 months and stay on to manage the relationship for 4-6 months. General and administrative costs for this project include legal fees for the establishment of an IP lawyer in China, salary for a licensing auditor, and engineering and administration costs associated with the final R&D of the product.

Cash Flow Summary

Manufacturing Partner Cash Flow Summary

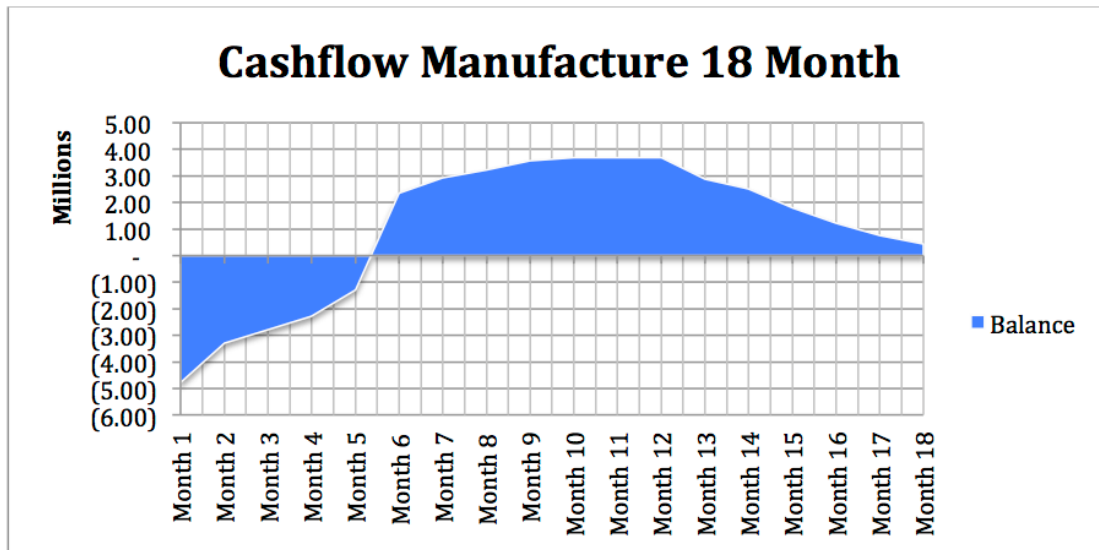


Figure 7. Licensee Cash Flow Representation

Figure 7 is an 18-month cash flow representation of the product life cycle of an average tablet. The cash flows for the partner of Genesi are based on scenario 2 capturing 1% of the \$27 billion market. The graph is curved to illustrate the adoption of the product and then the decline of the technology, as it is eclipsed by a new product. The figure demonstrates that there will be five months of negative cash flows beginning the project. The company then begins to receive positive inflows of cash for the remaining 13 months of product life cycle. See Appendix D for more financial assumptions.

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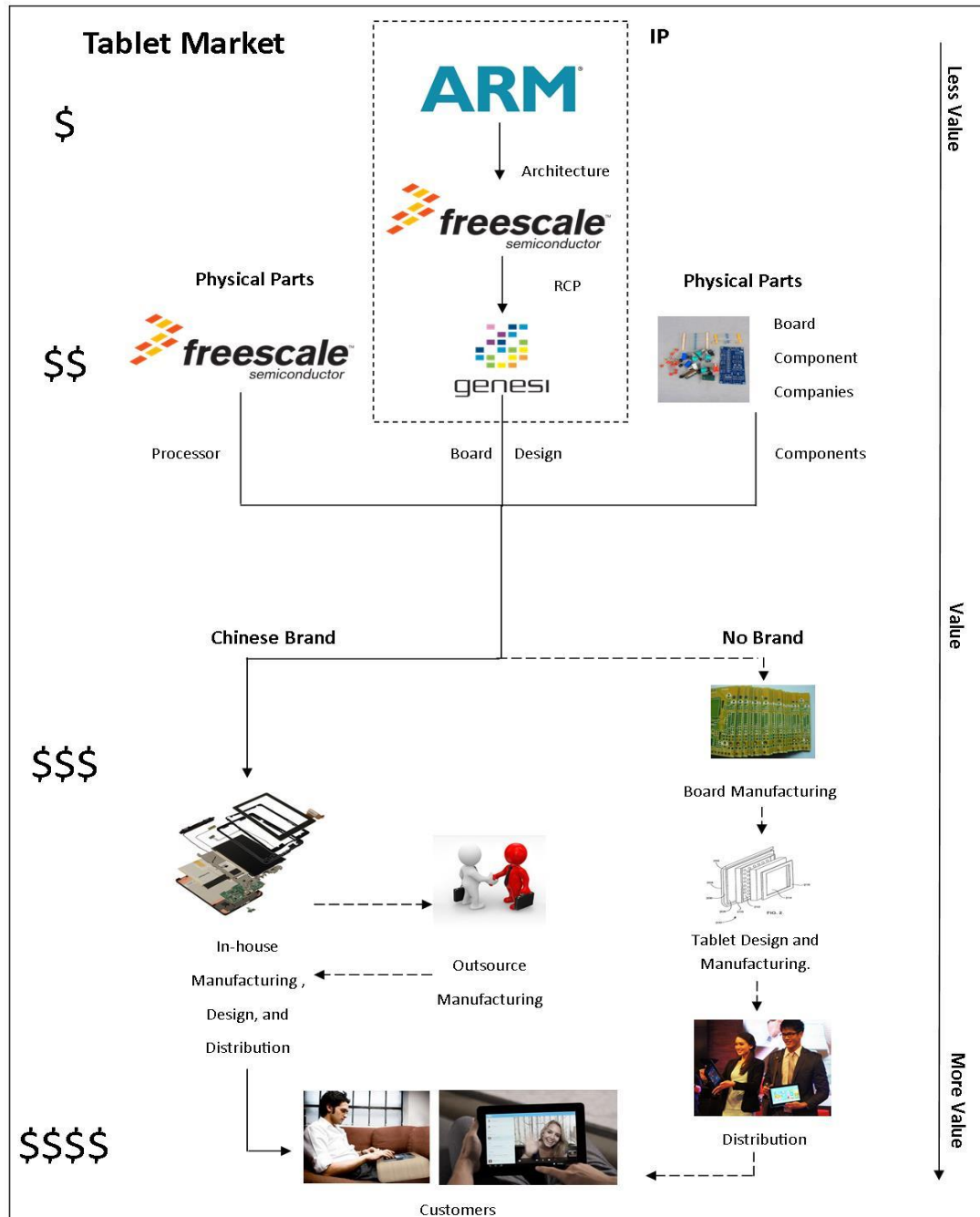
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Appendix

Appendix A: Value Chain Diagram



Appendix B: Alternative Market Conclusions

Tablet

Internet access is growing more and more common in China. Adults, teenagers, and even children are enjoying the benefits of online connections. They can read the news, watch movies, play games, and connect with each other via social networks. As the desire for these entertainment platforms increases, so does the desire for internet-accessing devices.

Because of China's recent economic boom, the Chinese people have an increased amount of expendable income to spend on electronic devices. Also, these electronics are no longer considered luxury items, rather affordable products, due to technology companies providing more cost-efficient devices.

Although the standard of living of the Chinese people is improving, it has not reached the point where they can purchase a variety of specialized devices. Owning a smartphone, tablet, and a computer, is often too costly. This is why the Chinese desire more portable, multi-feature devices that can make phone-calls, play movies and games, and surf the internet. Those who were interviewed by the team in Shenzhen confirm this. They would rather have one, tablet-like devices that has a variety of features, which explains why the Chinese tablet market is growing so quickly.

For these reasons and more, it is recommended that Genesi pursue a license agreement with Chinese tablet manufacturers. In the long run, Genesi can develop its reputation in China, opening doors to additional electronic markets.

Set Top Boxes

The Chinese market for set top boxes has shown growth recently. Chinese consumers are quickly moving toward online-based entertainment such as PPTV. On July 23rd, the Alibaba Group announced a new Smart TV operating system aimed to create a new “ecosystem” around the TV and the set top box. Alibaba appears to be openly welcoming Chinese electronics manufacturers to participate in this “ecosystem,” designing TVs, set top boxes, and even mobile devices to be compatible with the new operating system. As manufacturers seek a first mover advantage by quickly implementing this new operating system, there may be a good opportunity for the application of Genesi’s Aura Platform. This brand new opportunity is worth further research.

Wrist-Worn Device

Market research for wrist-worn devices including “smart-watches” suggests that the time is right for this market to bloom. In an Article from early April 2013 the

Shanghai Daily reported that, “ABI Research group predicts that smart-watches and other wearable computing devices will ‘explode in popularity over the next year’ and grow to 485 million annual device shipments by 2018”. This market represents a brand new area of technology and presents a great opportunity to forge a trail into unknown territory. However, many large and established firms have already begun production of such devices (Companies including Apple, Samsung, Sony, Fossil). With such a considerable list of competitors, it seems unlikely that Genesi would be able to find an appropriate licensing partner in China in a short enough time to beat these large companies to market. However, once Genesi’s RCP platform has reached a further level of integration, it is be feasible that an appropriate licensing partner in China would be able to compete in this market using the next generation of RCP. Additionally, this is an unproven market that poses risks for first mover companies. This risk is one we believe Genesi should not take until the market has been proven and validated.

HDMI Stick

An HDMI stick, or “PC-on-a-stick,” is a small computer which plugs into the USB or HDMI port of a digital display. The importance of hardware size within the stick suggests a potential application of the RCP platform. However, market research suggests there is not yet enough demand for the product to ensure a successful partnership for Genesi. Younger consumers in the market are showing a tendency to move towards portable mobile entertainment devices that are all-inclusive, requiring no need for a different screen. This change in Chinese technology culture suggests that HDMI sticks may not have a bright future. Similarly, a survey of Chinese students suggests that most homes in China include older television sets which may not have an HDMI port. Consequently, the team recommends that Genesi wait for visible market growth before seeking out a partnership in this market.

All-In-One Entertainment System

An All-in-One entertainment system may look like a regular TV, but it also includes a computer for downloading and playing games, movies, and music. The market in China is demanding portable devices that don’t take up lots of space and do everything. Though the All-In-Ones do have everything in one device, their lack of portability has not been proven to fit the Chinese market. They are attached to a plug that must be hooked up to power supply.

Along with that, research concludes that most All-in-One devices can be eliminated because of their involvement with x86 platforms. The RCP currently works off of the ARM architecture, and this causes a conflict of interest.

Digital Signage

Digital signs can be seen in store windows, convention centers, and hotels. Our team does not recommend this application for Genesi's platform, however. Research into the market showed that most digital signage is connected on a full network of five to ten signs and a media player of any size. Our platform seems to be suited best for a digital sign that is all-inclusive and would be independent and not need to run on a network or need a separate media player. Another issue is that a lot of digital signs in China are made from low-quality television sets or monitors that are used to advertise low quality images. Our platform seems to be geared as a higher quality processor that would produce high definition images and most likely sell at a higher price point in this market. Finally, as an ARM system with unprecedented hardware size reduction, Genesi's platform is optimized for a portable use. Most signage is not portable and is dependent on a power source. We feel that the Genesi platform does not line up with the current needs in the market and that our high-quality product would be sold at a higher price point and struggle to compete in a market satisfied with low processing power.

Point of Sale

Point of sale (POS) devices include digital cash registers, card readers, and similar equipment. By examining product availability from the top 10 POS Systems companies and articles found in business reports, the Chinese market for the POS devices does not look profitable. Out of the top 10 companies, 4 of them are solely POS software developers and marketers, and all 10 of them provide software for POS systems. Out of the 6 companies in that list that develop devices, 5 of them develop tools for computers, tablets, and other devices people already own, and they also provide all-in-one devices and tablets as a solution for anyone looking to use a POS System.

News articles prove what is shown by the data above: there is a decline in production of dedicated POS devices. The large devices are connected to barcode scanners, receipt printers, special keyboards, and many wires are all being replaced by the simple tablets and mobile devices that have cameras, small credit card reader attachments, and wireless connectivity to information databases. Companies like AccuPOS have moved their focus into software sales for Android systems in the UK. They see the POS software on a tablet or mobile device will integrate the accounting, merchant services, inventories, and sales logistics and save time and business money. Thus, the software brings about a larger profit than the POS device systems.

Car Navigation

The Chinese market for navigation systems in cars seems to be a possible fit for the Genesi platform. The technology is competitive with anything on the market and the specifications of the Genesi platform seem comparable or better than the competition in the field. The Chinese government has just spent 810 million dollars in investing in a Chinese navigation satellite company. Along with the expansion of roads, it appears that the market for in-dash navigation devices is growing. This

could be a fit for Genesi. However, amidst the explosion of portable smart devices which include navigation functionality, the modest market growth of car navigation has not yet proven that these devices have a legitimate place in the market.

Video Gaming Device

The video game industry appears that it could be set to explode in China with the lifting of the 13-year ban on video game consoles. The problem with the industry is the three major players are Nintendo, Sony, and Microsoft. These players are all vertically integrated, using their own in-house designers and manufacturers. On the portable gaming side, this is yet another market that points to the increased use of tablets and smart phones to meet the market need. We advise that Genesi steer clear of the market for dedicated video gaming devices.

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Appendix C: Potential Partner Profiles

To be a qualified potential partner for Genesi, a Chinese tablet manufacturer must fulfill the following requirements:

1. Financial capability to invest in R&D
2. Priority on quality and innovation
3. Customer base buys on brand name, not only specifications
4. Something to lose in reputation and capital, in the case of legal action
5. Utilizes economies of scale sufficient for mass production and distribution

Large Chinese or Taiwanese Brands

Well-known Chinese or Taiwanese electronics brands such as Huawei, Lenovo, ZTE, and Asus easily meet the qualifying criteria listed above. Each of these companies has sufficient financial resources, economies of scale, and a reputation worth protecting. Each has enough muscle to slightly manipulate the market through a disruptive innovation like RCP. Even with recognizable names, however, some of these companies are struggling to find their niche in the tablet market. This is evidenced as many of these companies have recently dropped their prices in order to grow their presence in the white box segment. The most important questions to be asked are “who is hurting the most?” and “who has aspirations of breaking out and achieving a higher quality?” Well-known companies that are vertically-integrated must be desperate enough to break their in-house momentum by outsourcing development.

Lenovo and **Asus** may not fit this profile, as the tech giants have already made themselves known as international competitors.

Huawei is an interesting case study. Although Huawei has met with recent success in tablet sales, the company is hardly achieving the desired level of international recognition. Huawei seems poised for a breakthrough. Although the name of “Freescale” is likely to be a hard sell with most Chinese manufacturers, Huawei may be an exception; the company relies on Freescale for digital signal processing components. On the other hand, danger is introduced through Huawei’s rumored connection with the Chinese government. With the right government ties, Huawei could trample on a license agreement that is signed in China, with little or no consequences. A license agreement with Huawei should invoke Hong Kong or U.S. law. **ZTE** is also rumored to have government connections.

Xiaomi is a relatively new company that has rapidly grown popular among young Chinese consumers. Unlike many of the above Chinese electronics brands, Xiaomi has taken a “quality-over-quantity” approach, developing its reputation with consumers through only one flagship product. As a result, consumers have learned to trust the Xiaomi name instead of pre-judging the product’s quality based on its

specifications. Xiaomi's product quality and marketing strategy have been compared to those of Apple, and the company is on track to become a serious international competitor in the near future. Xiaomi is unlikely to depart from its successful strategy of vertical integration.

Before Xiaomi rose to fame, **Meizu** successfully implemented the same "quality-over-quantity" strategy, emulating Apple, to become the Chinese leader in smartphones. While the company's brand name still holds weight, Meizu has hit a new low, its products falling to those of companies like Xiaomi and Oppo. Meizu desperately needs a big win. Genesi's modest specifications and premium user experience fit with Meizu's marketing strategy, and Meizu's ambitious software developers may be able to benefit from the Aura Platform. Although Meizu has not yet ventured into the tablet market, creating a 7-inch device with phone capabilities may be a strong possibility.

Similar companies: Acer, Hisense, Oppo

Emerging "White Box" Brands

So-called "white box" manufacturers tend to sell their products based on the set of specifications offered, while Chinese brands hold legitimacy through their brand name. However, there is no clear division between the two camps; every shade of grey is accounted for. Many borderline white box companies seek to elevate themselves out of this segment, to arrive upon higher profit margins and a greater brand reputation; this provides another opportunity for Genesi to provide their system solutions. However, Genesi must tread carefully in this segment, as there is some danger that a partner will violate the contract agreement or leak some proprietary information. The list of qualifying factors given above must be considered individually for every potential partner in this segment.

Companies like **Ainol** and **Teclast** are some of the best-known tablet makers that can arguably be placed in the white box segment. Although these companies still market their products based on specifications, their products have a far reach because of brand name. Companies such as these must be researched individually to determine the status of their brand names. Although Ainol appears poised to elevate its name to the next level, they seem to have their priorities elsewhere, as they provide virtually no customer support.

While typical white box manufacturers market some mix of specifications with a low price, there are companies like **Pipo** which couple specifications with a high quality. Some of Pipo's products sell for prices higher than that of established Chinese brands. This priority on quality may offer an opening for Genesi, although the visibility Pipo allows for their specifications may also cause an issue.

Eren Eben, recently acquired by Tsinghua Tongfang, made a huge splash in the tablet market in 2011 and 2012 by successfully implementing a unique marketing strategy. Eren Eben appeals to older consumers with its stylus-based tablet devices for drawing. For Genesi, this means a departure from the typical focus on specifications, which is important when considering the Freescale-based system. Additionally, the Aura Platform may offer some value, as Eren Eben tends to venture away from the typical Android user experience.

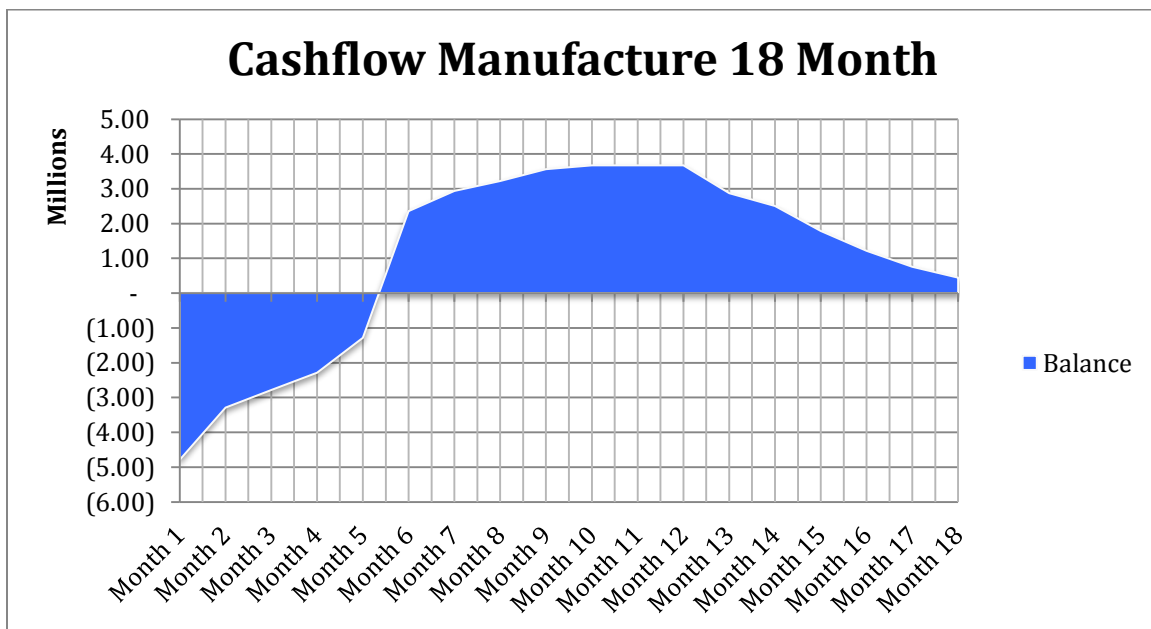
Similar companies: Onda, Ramos, Cube

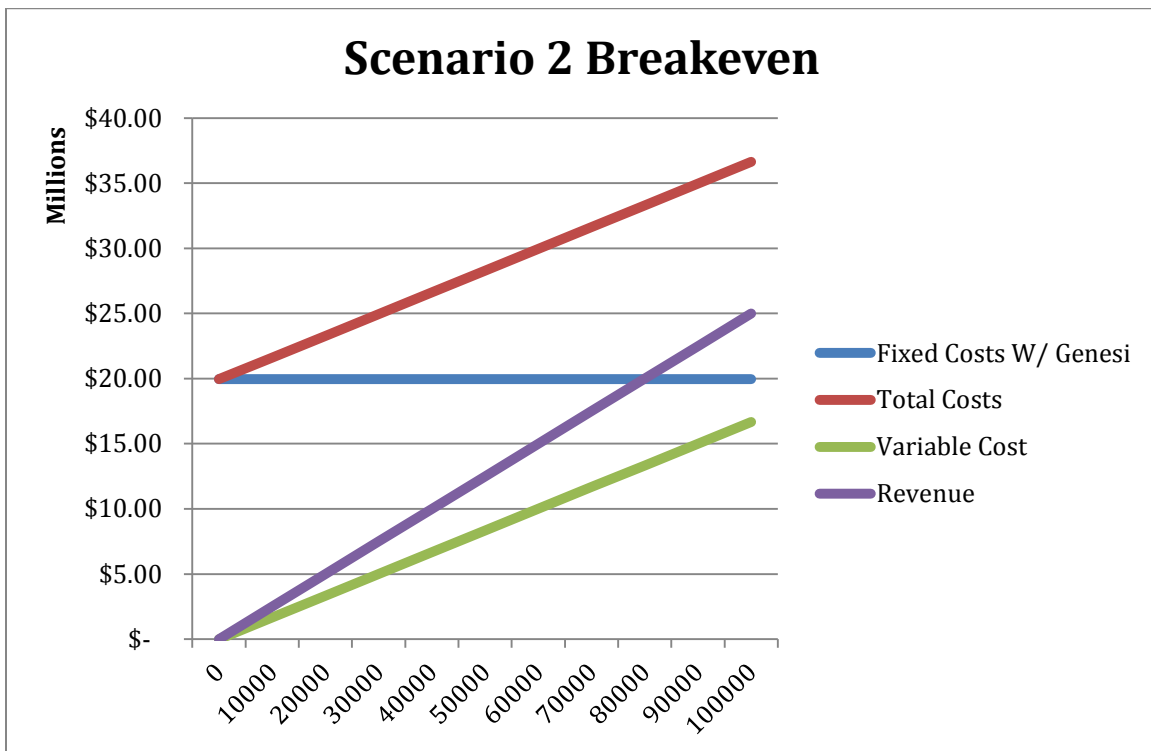
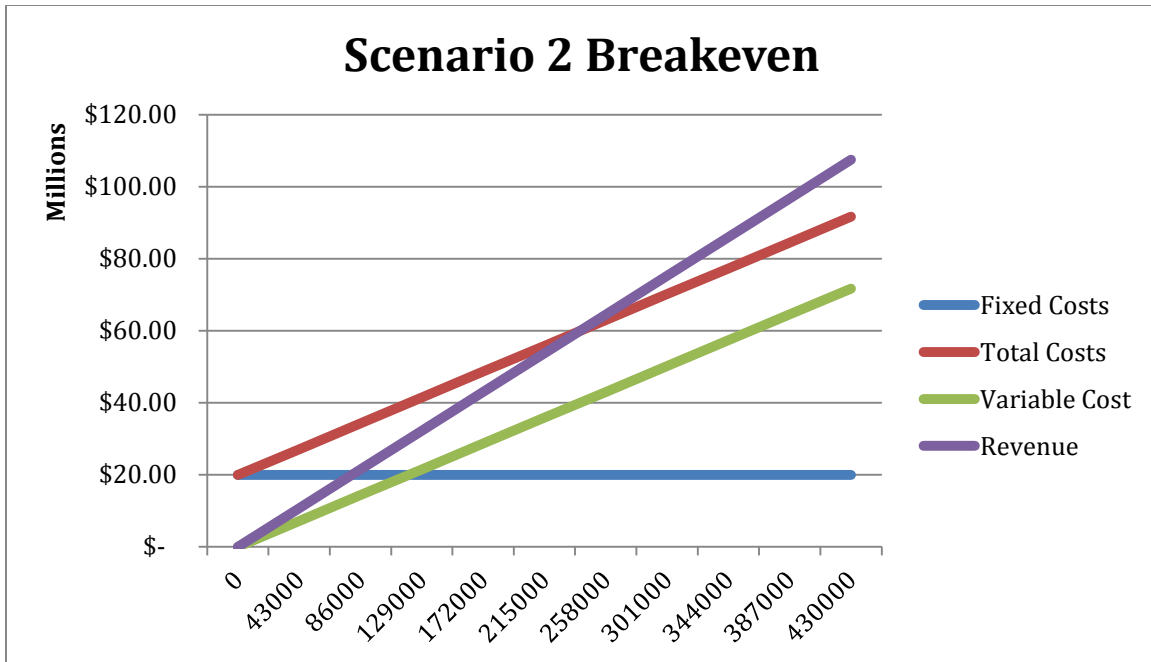
Appendix D: Financials

Genesi P&L for 3 Scenarios			
	Scenario 1-.5%	Scenario 2-1%	Scenario 3-3%
Revenue	\$2,650,000.00	\$4,800,000.00	\$13,400,000.00
Cost of Goods Sold	\$-	\$-	\$-
Gross Profit	\$2,650,000.00	\$4,800,000.00	\$13,400,000.00
<u>Operating Expenses</u>			
Research & Development	\$1,500,000.00	\$1,500,000.00	\$1,500,000.00
Marketing	\$-	\$-	\$-
Sales	\$225,000.00	\$225,000.00	\$225,000.00
General & Administration	\$200,000.00	\$200,000.00	\$200,000.00
Total Operating Profit	\$725,000.00	\$2,875,000.00	\$11,475,000.00
EBIT	\$725,000.00	\$2,875,000.00	\$11,475,000.00
Interest			
Taxes			
Net Income	\$725,000.00	\$2,875,000.00	\$11,475,000.00

Licensing Agreement			
Sales	Scenario 1	Scenario 2	Scenario 3
Licensing fee/unit	10.00	10.00	10.00
Units sold	215,000.00	430,000.00	1,290,000.00
Licensing up front cost	500,000.00	500,000.00	500,000.00
Revenue	2,650,000.00	4,800,000.00	13,400,000.00
Unit Calculator	Scenario 1	Scenario 2	Scenario 3
Projected Market Size 2014	43,000,000.00	43,000,000.00	43,000,000.00
Share of Market %	0.5%	1.0%	3.0%
Units Sold	215,000.00	430,000.00	1,290,000.00

P&L For 3 Scenarios			
	Scenario 1: <u>0.5%</u>	Scenario 2: <u>1%</u>	Scenario 3: <u>3%</u>
Revenue	\$53,750,000.00	\$107,500,000.00	\$322,500,000.00
Cost of Goods Sold	\$35,851,250.00	\$71,702,500.00	\$215,107,500.00
Royalty on per unit sales	\$2,150,000.00	\$4,300,000.00	\$12,900,000.00
Gross Profit	\$15,748,750.00	\$31,497,500.00	\$94,492,500.00
Operating Expenses			
Research & Development	\$5,375,000.00	\$10,000,000.00	\$10,000,000.00
Upfront Royalty	\$500,000.00	\$500,000.00	\$500,000.00
Marketing	\$3,000,000.00	\$3,000,000.00	\$3,000,000.00
Sales	\$1,075,000.00	\$2,150,000.00	\$6,450,000.00
General & Administration	\$1,612,500.00	\$4,300,000.00	\$12,900,000.00
Total Operating Profit	\$4,186,250.00	\$11,547,500.00	\$61,642,500.00
EBIT	\$4,186,250.00	\$11,547,500.00	\$61,642,500.00
Interest			
Taxes	\$1,046,562.50	\$2,886,875.00	\$15,410,625.00
Net Income	\$3,139,687.50	\$8,660,625.00	\$46,231,875.00





Financial Assumptions

Genesi P&L assumptions

1-R&D expenses for Genesi are related to the development of the platform. Since this platform has already been used on previous projects it directly effected and difficult to estimate. The estimate given is of the right order of magnitude for the R&D.

2-Genesi marketing costs are relatively minimal due to the nature of their business model. None of which would be project specific.

3-Genesi sales would cover the expense related to signing the licensing agreement. Such as plane flights, entrance fees for electronics fairs, hotel accommodations, the hiring of sales person to set up and sign the contract, and the hiring of translators. The sales person will be most likely involved in formation of the agreement for 2 months and stay on to manage the relationship for 4-6 months.

4-General and Administration costs for this project include legal fees for the establishment of an IP lawyer in China, salary for a licensing auditor, and engineering and administration costs associated with the final R&D of the product.

Licensing Agreement Assumptions

1- The licensing fee agreement per unit royalty was established using the same numbers as the El Salvador project. However we feel that the numbers used in the El Salvador project are higher than necessary for the Chinese market and that a more realistic royalty/unit cost would fall in the range of 2-5/unit.

2-Projected market share of tablets was estimated based off market share of tablets sold in China for 2012. Samsung had a market share of 3% and Ramos had a market share of .5%. The company Genesi would be partnering would likely fall in-between those parameters.

3- Units sold were calculated based off market share and the projected market size for 2014. These numbers verified as reasonable by checking them against the NEXUS 7 sales in China in 2012, which were estimated to be between 1 million units and 1.2 million units. This verified that the number generated from the market share assumption where the correct order of magnitude.

4-Projected market size was used from a Gartner report estimate units sold in 2014. The Gartner report does not include the sale of white box tablets, which would make the market larger. Therefore these numbers are a conservative estimate of the market size in 2014.

Manufacturers P&L

1-The COGS are the BOM+Manufacturing costs for the building of a Nexus 7. The information was found from an IHS isuppli teardown. In addition there was add an additional cost of the RCP. The RCP is estimated to sell at \$30-\$40. The components in the nexus 7 that are incorporated into the RCP costs \$21 processor, \$5.5 power management, and estimated Ram at \$9 at volume, summing up to a total cost of 35.5. The difference between \$40 and the 35.5 from the Nexus 7 is \$4.5 and the difference between 30-35.5 is \$-5.5. This means that based of this estimate the average cost of the RCP is a \$1 cheaper then all the components of the Nexus 7. So we just used the cost of goods sold for the Nexus 7 in our model.

2-This price was established based of the price for the 16Gb Nexus 7 which is a tablet that the Genesi platform could match in price point and quality.

3-The COGS are the BOM+Manufacturing costs for the building of a Nexus 7. The information was found from an IHS isuppli teardown

4-R&D was calculated based off the same Huawei case study that stated Huawei spent 10% of revenue on R&D in 2012. We used the straight 10% number, however this creates and issue with the P&L because it causes the R&D to act more like an variable costs then an actual fixed costs to remedy this error, we set a threshold R&D level of \$10 million dollars. We do believe that a partnership with Genesi will directly effect this number reducing the R&D.

5- Marketing was estimated off a quarterly report for Huawei. The marketing expenses for Huawei were 1.1 million for the quarter. We estimate that the project marketing expense can not reasonably exceed 3 million dollars

6 & 7-Huawei cast study stated that the sales and administration cost for Huawei during 2012 was 6% of their revenue we used 2% of the revenue for sales and 4% of the revenue for G&A.

#REF!

8-Interest is assumed to be irrelevant in terms of this project. It is assumed that the partner would have the capital necessary or would be

able to acquire the necessary capital.

9- Taxes are set at the Chinese corporate tax level of 25% this is the flat taxes that is universal in China that is applied to all corporations.

SOURCE=<http://www.kpmg.com/global/en/services/tax/tax-tools-and-resources/pages/corporate-tax-rates-table.aspx>

Cash Flows Manufacturer 18 months

1- R&D% is used to calculate the amount of R&D spent each month for the cash flow statement. We assumed that the majority of R&D costs are upfront and decrease to 0 for a single project after the sales have begun. This estimate was made to help illustrate how a manufacture would have huge negative cash flows first few months of the sales.

2-Sales Units are used to determine the percentage of the total sells of the product that would be sold in each month. The company will not place the first tablet into a consumer's hand until the 6th month. This percentage was also used to help create a cash flow statement that depicts a typical product life cycle the product sales start slow and then level out until they begin to decline for various reasons. Reasons that they begin to decline are the product is becoming obsolete, the company has now come out with version two of the tablet and phasing version one out of production, or finally the manufacture has dropped the price of the product to keep it competitive.

Appendix E: Call Worksheets



Interviewees in Shenzhen



Call Worksheet

Contact Name <i>Terence Tam</i>	Hypothesis: <i>Intellectual property can be protected by Chinese law.</i>
Title <i>China Business Advisor</i>	
Company <i>Hong Kong Trade Development Council</i>	Objective for Call: <i>Learn about the buying process for a Chinese tablet manufacturer, receive perspective on intellectual property in China.</i>
Phone: <i>(852) 2240 5917</i>	
email: <i>terence.tam@hktdc.org</i>	

Information about my company/ product that it is necessary for me to reveal in this call: <i>Basic licensing model, current outlook in terms of potential partners</i>	When I am finished with this call, I will have learned: <i>Terence's perspective on the buying process, promotional strategy, IP strategy</i>
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Key Take-a-ways from this call are: <i>Number one method of initiating technology exchange in China is trade shows. "In China, business is done not on the business table, but on the dining table." A partner should be chosen who seeks to establish respect internationally. If Genesi's technology is allowed to get into the wrong hands, it's already too late.</i>	Specific questions for this call are: <i>What is the buying process for OEMs and suppliers? What is the best promotional strategy to implement? What are the keys to establishing a trust relationship with a Chinese partner? Are there special factors to consider when negotiating with a potential Chinese licensee?</i>
	Hypothesis Confirmed: <i>N</i>
	Hypothesis Reframed: <i>Little can be done by contract or Chinese law if a crooked partner is chosen</i>

NOTES: *Terence said that the number one method of initiating technology exchange (including license agreements like Genesi's) is through participation in trade shows and exhibitions. Terence listed the most well-known fairs that fit Genesi's goals, such as the China Hi-Tech Fair in Shenzhen. The exhibitors representing potential partner companies report back to their superiors with the most intriguing and relevant information gathered through contact with other exhibitors throughout the day. To establish a relationship with a potential partner, Genesi should send one or more representatives to get a booth and make contact with other exhibitors. Terence mentioned that establishing a personal connection with company representatives is very effective: "In China, business is done not on the business table, but on the dining table." After signing a contract, Genesi should be willing to celebrate by drinking and eating with the partner, in order to establish a long-lasting relationship. Regarding intellectual property, Terence advised me to only consider as partners the larger Chinese companies that have reputations reaching into the international stage. International players can be expected to adopt international standards regarding IP. In addition to warning against bad partners, Terence warned against Chinese "cottage manufacturers" that may be hired by our partner. Little can be done by law if the information gets into the wrong hands.*

Call Worksheet

Contact Name <i>Yuki Hui</i>	Hypothesis: <i>Various measures can be taken to minimize the dangers of licensing IP to a Chinese firm</i>
Title <i>Senior Manager, Sales & Marketing Dept.</i>	
Company <i>Hong Kong UTC Intellectual Property (Holdings) LTD.</i>	Objective for Call: <i>Learn what measures can be taken and their approximate cost</i>
Phone: <i>+852 6170 8407</i>	
email: <i>yhui-hk@utcip.hk</i>	

Information about my company/ product that it is necessary for me to reveal in this call: <i>Basic licensing business model</i>	When I am finished with this call, I will have learned: <i>What measures are recommended by the service provider who stands to benefit from our precautions</i>
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Key Take-a-ways from this call are: <i>After establishing legal rights, recommended services for protection through the licensing process include: partner background check, a lawyer familiar with local law and customs, and a local accounting agent to monitor partner's actions. All these services can be provided as a one-stop solution through companies like HK UTC.</i>	Specific questions for this call are: <i>What factors/dangers should I be concerned about through the licensing process? What measures can be taken to minimize risk? Do you provide these services, and how much do you charge?</i>
	Hypothesis Confirmed: <i>Y</i>
	Hypothesis Reframed:

NOTES: <i>Yuki first addressed the process of establishing legal rights through patents, trademarks, copyrights, etc. Yuki recommends copyrighting Genesi's software image as soon as possible, as in China the copyright process takes 3 months. Once a partner has been selected, a background check should be performed. A local lawyer should then assist with negotiating and writing the contract. Finally, a local agent should stay in China and keep tabs on the partner's activity, accounting for all sales of the Genesi product, and also addressing any issues with the complex Chinese taxation system. This last agent, whose services will continue for as long as the partner sells Genesi products, likely determines his/her fees according to time period. Of course, Yuki proceeded to recommend his company, UTC Intellectual Property, as they have 70 offices located all around China, including Shenzhen. UTC could be a one-stop solution for Genesi in their partnership. For a preliminary price quote, Yuki asked for an email with a potential partner's name and some basics on the licensing model.</i>

Call Worksheet

Contact Name: Ms. Shao	Hypothesis: The front line vendors know the market and the customers well
Title: Owner	
Company: Chuangqi Technology	Objective for Call: Understand the current trend in the tablet market from the front line vendors
Phone: +86 13530572922	
email: N/A	

Information about my company/ product that it is necessary for me to reveal in this call: We are market researchers that is helping our client to look into the Chinese tablet market	When I am finished with this call, I will have learned: the sizes of the tablets that are the best sellers; specs that are popular now in the market; if or not the vendor design and produce their board by themselves.
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Key Take-a-ways from this call are: 7inch phablets are the best sellers in the tablet market; customers care about the durability of battery very much; most of her customers are vendors.	Specific questions for this call are: Which is the most popular model here? What specs does it have? Do you own this brand? Do you manufacture by yourself? Are most of your customers individual customers or vendors?
	Hypothesis Confirmed: Y
	Hypothesis Reframed:

NOTES: The owner gets her supply from manufacturers. Her role is a retailer in the market. The most popular model uses 1 embedded and 2 removable batteries; she shows us two models that are manufactured by the same manufacturers, with the brand name Royalstar and Samsung respectively. The Samsung one is a copycat.

Call Worksheet

Contact Name: Mr. Zeng	Hypothesis: The front line vendors know the market and tge cusgomers well
Title: Business Manager	
Company: KO	Objective for Call: Understand the current trend in the tablet maret from the front line vendors
Phone: +86 13823185273	
email: 328634298@qq.com	

Information about my company/ product that it is necessary for me to reveal in this call: We are market researchers that is helping our client to look into the Chinese tablet market	When I am finished with this call, I will have learned: the sizes of the tablets that is the best sellers; specs that are popular now in the market; if or not the vendor design and produce their board by
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Key Take-a-ways from this call are: Customers prefer quad core, ips screen, and preferably with call funcion. 7inch and 10inch sell best.	Specific questions for this call are: Which is the most popular model here? What specs does it have? Do you own this brand? Do you manufacture by yourself? Are most of your customers individual customers or vendors?
	Hypothesis Confirmed: Y Hypothesis Reframed:

NOTES: A 7inch quad core tablet sells at 490 RMB. Appointment could be made via online application.

Call Worksheet

Contact Name: Ms. Chen	Hypothesis: The front line vendors know the market and the customers well
Title: Sales person	
Company: Souiycin	Objective for Call: Understand the current trend in the tablet market from the front line vendors
Phone: Unknown	
email: Unknown	

Information about my company/ product that it is necessary for me to reveal in this call: We are market researchers that is helping our client to look into the Chinese tablet market	When I am finished with this call, I will have learned: the sizes of the tablets that are the best sellers; specs that are popular now in the market; if or not the vendor design and produce their board by themselves.
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Key Take-a-ways from this call are: The endorsement of a well known celebrity adds credibility to the brand and product. Customers care about sensitivity of the screen, and specs. 7 inch tablets sell best. For that model, in average each vendor will buy 10 to 20 in a time from Souiycin.	Specific questions for this call are: Which is the most popular model here? What specs does it have? Do you own this brand? Do you manufacture by yourself? Are most of your customers individual customers or vendors?
	Hypothesis Confirmed: Y Hypothesis Reframed:

NOTES: This vendor is a retail store of the Souiycin products. They get a vast amount of tablets from Souiycin, and vendors will come and buy from them because they can only buy small amount (like 10 to 20) in a time in a convenient location. This brand hires a well known celebrity as an endorser.

Call Worksheet

Contact Name: Ryan	Hypothesis: The front line vendors know the market and tge cusgomers well
Title:Unknown	
Company:Dafurong	Objective for Call:Understand the current trend in the tablet maret from the front line vendors
Phone:+86 13631691566	
email:	

Information about my company/ product that it is necessary for me to reveal in this call: We are market researchers that is helping our client to look into the Chinese tablet market	When I am finished with this call, I will have learned:the sizs of the tablets that is the best sellers; specs that are popular now in the market; if or not the vendor design and produce their board by
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Key Take-a-ways from this call are: Normally there are specific company that produces the chip, and a lot of manufacturers just go buy it and do the assembling parts, which does not require advanced technics, which cuts their costs greatly, thus earning the margin.	Specific questions for this call are:Which is the most popular model here? What specs does it have? Do you own this brand? Do you manufacturers by yourself? Are most of your customers idividual customers or vendors? How do you keep up with the latest technology?
	Hypothesis Confirmed: Y Hypothesis Reframed:

NOTES: Their products have no brand name. They manufacture their own products, but they get the board from other companies like Pufangda and Dingzhi. Normally, they hear about the new technology or design from a board company, they go get them and assemble the parts by themselves. Thats how they run their business.

Call Worksheet

Contact Name: Kiera	Hypothesis: Consumers are interested in a 7" tablets and are using them for more activities.
Title: Student, 22yr.	
Company:	
Phone:	
email:	Objective for Call: Find out why consumers buy tablets and how they are using them

Information about my company/ product that it is necessary for me to reveal in this call: Our intention as market researchers.	When I am finished with this call, I will have learned: More about tablet consumer preferences.
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Key Take-a-ways from this call are: She owned a 7" Huawei tablet. Has a problem and restarts by itself. Her Battery lasts about 6-12 hours. She uses it for some movies, but mainly internet and chatting with friends. She wants to get a samsung next time. We learned that many students do not have enough money to buy a brand name tablet, so the "white-box" tablets are better for them.	Specific questions for this call are: Do you own a tablet? Why did you buy a tablet? What do you use it for? Is there anything you don't like about your tablet? Do you know many people who have tablets? What do they use them for?
	Hypothesis Confirmed: Yes
	Hypothesis Reframed:

NOTES:

Call Worksheet

Contact Name: Wendy	Hypothesis: Consumers want about a 7" tablet, and are using them for more activities
Title: Owner	
Company: Rich Concept Co.	Objective for Call: Find out consumer preferences for tablets.
Phone: 12098418885	
email:	

Information about my company/ product that it is necessary for me to reveal in this call: We are market researchers for an American electronics company.	When I am finished with this call, I will have learned: The preferences of consumers as related to tablets. Why people buy tablets and how they use them.
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Key Take-a-ways from this call are: Wendy was not just a consumer, she was a vendor that sells tablets over the internet. She only uses MediaTek chips. She said that Allwinner is bad and has problems with charging and gets too hot. She confirmed that the 7" tablets are selling best, and that the "Phablets" are selling very fast as well. Wendy sells the cheaper "white-box" tablets and they usually last 3-4 months, while the nicer ones can last a year.	Specific questions for this call are: Do you buy/use tablets? What do you use them for? What features do you like? What tablet sells the best? Which processors seem to be the most popular? What are the biggest problems your customers have?
	Hypothesis Confirmed: Yes
	Hypothesis Reframed:

Call Worksheet

Contact Name: Mario Ma	Hypothesis: Our RCP technology is helpful and attractive for manufacturers
Title: Deputy General Manager	
Company: Shenzhen Forzen Technology Co., Ltd	Objective for Call: Validate assumptions about the value of our package, learn the structure of the value chain
Phone: +86-13510199418	
email: mario@forzen-tech.com	

Information about my company/ product that it is necessary for me to reveal in this call: Essential benefits of the package from Freescale and our principal company (Genesi's identity will not be revealed), a brief technical explanation, our intention as market researchers	When I am finished with this call, I will have learned: Where this company sits in the value chain, whether or not our product will be valuable to them, their opinion of Freescale, (if possible) their level of interest in each benefit
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Key Take-a-ways from this call are: Low power consumption and ability to dissipate heat are crucial for the stability of tablet performance; flexibility of software sounds appealing to him, an operating system that is open to write and develop might be a potential business niche in the future; switching from Allwinner to Freescale would be hard because it might cut off all they know; Chinese people like to do business with old business partners.	Specific questions for this call are: What role do you play in the value chain? How much are you interested in our technology? What are the main concerns when selecting an operating system? Is the switching cost high of switching from processor to another? What do you think of Freescale and this new technology?
	Hypothesis Confirmed: Y
	Hypothesis Reframed: Our package is especially valuable because of size reduction

NOTES: This company designs and manufactures boards, assembles tablets, and sells it to vendors who put their brand name. They normally use Allwinner. They are not the trendsetter; all they do at the moment is just following the trend. They consider a long battery life being very important, the trend in the market of the tablets will be thinner and more portable in the near future. Among Apple, Windows, and Android, Mario thinks that: Apple is the best one so that with the highest technology that can guarantee the synergized performance of the system, while Windows is the most familiar one to a lot of users, people would love to use it if it comes up with new technology because people know it, but Android would be the most open one among the three, that a lot of people can penetrate the market by writing apps and developing it by themselves unlike Windows. However, so far, some white box manufacturers still cannot catch up and come up with matching technologies that can guarantee the consistent performance of the machine, which makes it unstable in his words. He mentioned that Apple puts a big, high-capacity battery in their iPad, which customers love. Having more space in the tablet shell would be very valuable because they could fit a better battery, or even have empty space designed to better dissipate heat, which would improve stability. Mr. Ma rated his interest at a 10 out of 10. Also, Mr. Ma said he could design a board in 1-2 months, and he could design a tablet in less than a month; in his words, his speed is okay, but not the best. Faster time to market seemed appealing.

Call Worksheet

Contact Name: <i>Andy Jin and Kevin Yuan</i>	Hypothesis: <i>(Following meeting with Forzen Tech) Size reduction is a valuable benefit for</i>
Title: <i>Chairman and Sales Manager</i>	
Company: <i>Shenzhen Urbetter Technology Co., Ltd.</i>	
Phone: <i>+8613682666255, +8613417396284</i>	
email: <i>andy_jin@urbetter.com, kevin_yuan@urbetter.com</i>	Objective for Call: <i>Validate assumptions about the value of our package, learn the structure of the value chain</i>

Information about my company/ product that it is necessary for me to reveal in this call: <i>Essential benefits of the package from Freescale and our principal company (Genesi's identity will not be revealed), a brief technical explanation, our intention as market researchers</i>	When I am finished with this call, I will have learned: <i>Where this company sits in the value chain, whether or not our product will be valuable to them, their opinion of Freescale, (if possible) their level of interest in each benefit</i>
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Key Take-a-ways from this call are: <i>Freescale's pricing strategy and slow development cycle don't fit well with the Chinese phone/tablet market. Chinese consumers are focused on buying the newest and flashiest specifications, which Freescale does not offer.</i>	Specific questions for this call are: <i>Do you design boards? Manufacture? Do you design tablets? Assemble? What do you think of the idea of RCP? What brand of processors do you use and why? What do you think of Freescale? Is the size reduction a valuable benefit to you?</i>
	Hypothesis Confirmed: <i>Y</i>
	Hypothesis Reframed: <i>Size reduction is valuable, but having to go through Freescale may be a deal-breaker.</i>

NOTES: *Andy, an engineer, immediately questioned us on the technical details: how does it work? For the future, we should be careful about gathering market research from an engineer. Andy reacted very negatively to the mention of Freescale. He said there are two ways to be successful in this Chinese market: (1) Continually release brand new, innovative technology for whatever price you want, or (2) Follow the trends, release cheap products, be an expert in gauging where the market will be in 3 months, 6 months, a year. Freescale does neither (it doesn't innovate consistently enough for the fast-paced mainland market). Allwinner, Rockchip, and MediaTek lower prices continually and consistently release new products. On the mainland, new and flashy specs sell! Andy also gave us some additional insider information: other companies are putting RAM and flash together onto PoP, and Intel and Samsung are collaborating to release a product to compete in the white box market!*

Call Worksheet

Contact Name: Mr. Yuan	Hypothesis: The smaller board size is valuable to company, but Freescale technology seems questionable.
Title: GM	
Company: Shenzhen Ipalm Technology Development CO, LTD.	
Phone: 0755-232-15022	
email: ericwwyuan@gmail.com	Objective for Call: Validate assumptions about the value of our package, learn the structure of the value chain

Information about my company/ product that it is necessary for me to reveal in this call: Essential benefits of the package from Freescale and our principal company (Genesi's identity will not be revealed), a brief technical explanation, our intention as market researchers	When I am finished with this call, I will have learned: Where this company sits in the value chain, whether or not our product will be valuable to them, their opinion of Freescale, (if possible) their level of interest in each benefit
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Key Take-a-ways from this call are: Size reduction of board is a valuable characteristic. Freescale is viewed as an inferior product because of slow product development cycle. Chinese market is driven by tablet specs. We should communicate with companies that are already using Freescale. This company already does some of the same things as Genesi.	Specific questions for this call are: Do you design and manufacture your own boards? Do the advantages our company offer seem appealing to you? If you had extra space in your tablet, what would you do with it? Do you know/have you used Freescale? Would it be difficult for your engineers to switch the type of processor they work with? Would it be beneficial to you to be able to use different operating systems on your tablets?
	Hypothesis Confirmed: Yes
	Hypothesis Reframed:

NOTES: We learned a great deal from the Ipalm company. In addition to discovering that Freescale may not be the ideal processor company in China, Mr. Yuan gave us some valuable insight about possible disadvantages of the RCP process. He told us that the prices for pieces such as flash and DDR fluctuate quite often and that combining them into one package may make it difficult to sell at certain times when the prices fall. Committing to a certain type of flash and DDR early on in the design process may not be appropriate for products sold in China. Additionally, he mentioned that he would have minimal interest in being able to use multiple operating systems, likely Windows, because about 20% of his customers had expressed an interest in using Windows. Mr. Yuan had little interest in Ubuntu or other operating systems. Mr. Yuan's experience with Freescale was limited to using the i.mx51 in the past, but stopped because it had bad power consumption. Additionally, his wife had been a Field Analysis Engineer for Freescale in the past and this is where his work with Freescale had begun. his company now uses Rockchip processors because they have better power efficiency than Allwinner and the old Freescale chip.

Appendix F: Electronic Fairs

According to Terence Tam of the Hong Kong Trade Development Council, the number one method of initiating technology exchange in China is participation in electronic trade fairs. Below are upcoming fairs which are recommended to Genesi for finding a Chinese partner.

Name	39 th Taipei International Electronics Show 台北国际电子产业科技展	HK Electronics Fair (Autumn Edition) 香港秋季电子展	82 nd China Electronics Fair / 8 th Asian Electronics Exhibition in Shanghai 中国电子产品展 / 2013 亞洲電子展	China Hi-Tech Fair 中国国际高新技术成果交易会
Date	October 8 – 11, 2013	October 13 – 16, 2013	November 13 – 15, 2013	November 16 – 21, 2013
Location	Taipei, Taiwan	Hong Kong	Shanghai, China	Shenzhen, China
Organized by	Taiwan External Trade Development Council (TAITRA)	Hong Kong Trade Development Council (HKTDC)	China Electronic Appliance Corporation (CEAC)	Ministry of Commerce, Ministry of Science and Technology, Ministry of Industry and Information Technology and National Development and Reform Commission etc. and Shenzhen Municipal People's Government.
Size	748 exhibitors, 1412 booths, 40,955 visitors		57,500 sq.m, 1800 exhibitors, 60,000 buyers	105,000 sq.m, 58 nations represented, 2928 exhibitors, 540,000 visitors, 2504 investors
Price	Standard Shell Scheme (3m x 3m): USD 2280/booth (6m x 3m): USD 4460/booth Raw Space (3m x 3m):		Standard booth (3m x 3m): USD 2520/booth Open booth space (minimum 36 sq.m): USD 260/sq. m	Overseas exhibitors can only join in groups, meaning that companies need to apply with other organizations that are joining.

	USD 2080/9 sq.m			
Contact number	Mr. Klaas Lin +886-2-2725-5200 ext. 2649		+86-10-5166 2329	Chen Xiaoli (Lisa) +86 0755 82848652
Email	Klaaslin@taitra.org.tw		cefinfo@ceac.com.cn exhibitions@ceac.com.cn	lisa@chtf.com
Website	http://www.taitronics.tw/en_US/index.html	http://www.hktdc.com/fairapplication/ea/login.htm?fairId=1203&locale=en	http://www.icef.com.cn/falleng/index.shtm Some general information: http://www.icef.com.cn/falleng/upload_file/cefProspectus.pdf	http://www.chtf.com/english/exhibition/transaction/
Deadline of application	August 31, 2013	March 8, 2013	September 30, 2013	September 15, 2013
Comments	Co-located: 2013 Broadband Taiwan; 2013 Taiwan Int'l Technology & Internet of Things Show		China Electronics Fair (CEF) is known as the No.1 Electronics Fair in China; It is held in conjunction with Asia Electronics Exhibition in Shanghai (AEES 2013), 2013 China LED Fair –Shanghai, and 2013 IC China	Up to now, 14 CHTFs have been successfully held in succession. For each CHTF, the total exhibition area exceeded 100,000 sq.m, the exhibitors were near 3000 from more than 50 countries and the visitors surpassed 500,000. It is the largest and most influential scientific and technological fair in China.

Note: The Asian Electronics Exhibition Conference Confederation (AEECC) was established in 1997 to encourage mutual promotional cooperation activities among top 5 electronics and IT exhibition organizers in the Asia region. AEECC members include **China Electronics Fair, CEATEC JAPAN, Hong Kong Electronics Fair, Korea Electronics Show and Taitronics.**

Appendix G: Two Weeks to Find a Chinese Partner

Trip Itinerary, based upon Travelocity airfare below

Sun, Nov 10	Fly out of San Antonio, 7:15am
Mon, Nov 11	Fly into Shanghai, 4:00pm
Wed, Nov 13 – Fri, Nov 15	China Electronics Fair / Asian Electronics Exhibition in Shanghai
Fri, Nov 15	Fly out of Shanghai, 7:35am
	Fly into Shenzhen, 10:05am
Sat, Nov 16 – Thu, Nov 21	China Hi-Tech Fair in Shenzhen
Fri, Nov 22	Fly out of Shenzhen, 11:00am
	Fly into San Antonio, 10:08pm

Approximate Trip Costs

	One Traveler	Bill and Raquel	Two Travelers	Notes
Airfare	\$2,174	\$4,348	\$4,348	See example Travelocity airfare
Shanghai Hotel	\$372	\$372	\$744	Bodi Boutique Hotel, "Deluxe Big Bed Room" at \$93/night for 4 nights (breakfast included for 2)
CEF/AEES Entry Fees	\$2,520	\$2,520	\$2,520	One standard booth (3m x 3m)
Shanghai Translator	\$600	\$600	\$600	3 days (Tue - Thur) at \$200/day or 1224RMB/day, http://www.locatran.com/choose/yykybj.asp
Shenzhen Hotel	\$858	\$858	\$1,715	Golden Central Hotel, business suite at 750RMB/night for 7 nights (breakfast included for 2)
CHF Entry Fees	\$2,520	\$2,520	\$2,520	Assuming approximately equal to fees for CEF/AEES
Shenzhen Translator	\$910	\$910	\$910	7 days (Fri - Thur) at \$130/day or 800RMB/day, http://www.tominterpreter.com/kaoyi.html
Meals	\$352	\$704	\$704	Assuming average \$16/meal or 98RMB/meal, 2 meals/day (breakfast at hotels), 11 days
Transportation by Taxi	\$136	\$136	\$136	4 rides between hotel and airport at 98RMB or \$16 each + additional 40RMB or \$6.50 per day
	\$10,441	\$12,967	\$14,197	

Travelocity Airfare - \$2,173.99

Sun, Nov 10, 2013

San Antonio International Airport (SAT) to Shanghai Pu Dong Airport (PVG)

Depart: 07:15am

Arrive: 11:18am

San Antonio, TX (SAT) to

Detroit, MI (DTW)

Delta Air Lines

Flight 4904 operated by EXPRESSJET DBA DELTA CONNECTION

Economy Class

(on Canadair Regional Jet 900)

[Adult fare rules\(Opens in a new window\)](#)

1 Stop – change planes in Detroit, MI (DTW)

Connection Time: 47 mins

Depart: 12:05pm

Arrive: 04:00pm

Next day

Detroit, MI (DTW) to

Shanghai Pu Dong, China (PVG)

Delta Air Lines

Flight 181 Economy Class

(on Boeing 777)

[Adult fare rules\(Opens in a new window\)](#)

Total Travel Time: 18 hrs 45 mins

Fri, Nov 15, 2013

Shanghai Pu Dong Airport (PVG) to Shenzhen (SZX)

Depart: 07:35am

Arrive: 10:05am

Shanghai Pu Dong, China (PVG) to

Shenzhen, China (SZX)

Air China Intl

Flight 1893 Economy Class

(on Airbus A321-100/200)

[Adult fare rules\(Opens in a new window\)](#)

Total Travel Time: 2 hrs 30 mins

Fri, Nov 22, 2013

Shenzhen (SZX) to San Antonio International Airport (SAT)

Depart: 11:00am

Arrive: 01:15pm

Shenzhen, China (SZX) to

Shanghai Pu Dong, China (PVG)

Delta Air Lines

Flight 7803 operated by China Southern Airlines

Economy Class

(on Airbus A321-100/200)

[Adult fare rules\(Opens in a new window\)](#)

1 Stop – change planes in Shanghai Pu Dong, China (PVG)

Connection Time: 4 hrs 20 mins

Depart: 05:35pm

Arrive: 06:15pm

Shanghai Pu Dong, China (PVG) to
Detroit, MI (DTW)

Delta Air Lines

Flight 180 Economy Class
(on Boeing 777)

[Adult fare rules\(Opens in a new window\)](#)

1 Stop – change planes in Detroit, MI (DTW)

Connection Time: 1 hr 20 mins

Depart: 07:35pm

Arrive: 10:08pm

Detroit, MI (DTW) to

San Antonio, TX (SAT)

Delta Air Lines

Flight 4903 operated by EXPRESSJET DBA DELTA CONNECTION
Economy Class
(on Canadair Regional Jet 900)

[Adult fare rules\(Opens in a new window\)](#)

Total Travel Time: 25 hrs 8 mins

8/13/13 Price on Travelocity.com, per Economy Traveler: \$2,173.99

Translators

1). LOCATRAN (Shanghai)

<http://www.locatran.com/choose/yykybj.asp>

900-1500 yuan/day (8 hours); if less than 4 hours, it will be counted as half a day; if between 4-8 hours, it will be counted as one day; if time exceeds 8 hours, the extra hours will be 150-400 yuan/hour

2). JWBY Translation (Beijing)

<http://www.gavintrans.cn/html/price/2.html>

600-1200 yuan/day (8 hours)

3). TOM (Shenzhen)

<http://www.tominterpreter.com/kaoyi.html>

600-800 yuan/day, half day 400+

4). Chinatranslation (Taipei)

<http://www.chinatranslation.cn/about/price.htm>

600-2000 yuan/day