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PALTEK CORPORATION

Summary of 1H FY12/15 Financial Results and Follow-Up Interview

The PALTEK Corporation (hereinafter “PALTEK” or the “Company”) announced its Q2 cumulative (Jan-Jun; hereinafter “1H”) FY12/15 consolidated financial results, and held an analyst meeting on the same day. The following is a summary of the results, and follow-up interview with President Naohide Yabuki by Trias Corporation.

Summary of 1H FY12/15 Consolidated Financial Results

The Company’s consolidated financial results for 1H FY12/15, announced on August 5, were in line with revised forecasts announced on July 9. It is worth noting that net sales and incomes largely exceeded revised forecasts announced on April 9 accompanying Q1 (Jan-Mar) financial results. Yet, the Company faces intense price competition in the market, and is therefore determined to continue its efforts to add value in all of its businesses.

As shown in Table 1, 1H FY12/15 net sales rose 14.0% YoY, while incomes surged, with operating income up 78.8% YoY, and net income up 99.0% YoY. However, this was largely due to the impact of foreign currency on procurement of products from a major overseas vendor, and operations were in fact relatively severe, as operating income actually saw a slight decrease when excluding the impact of foreign exchange. This decrease can be attributed to the concentration of sales in mainly low-margin semiconductors in transactions accompanying the acquisition of commercial rights, as well as in certain large-size transactions.

- **[Table 1] 1H FY12/15 Consolidated Financial Results**

(¥ million, %)	1H FY12/14 Actual		1H FY12/15 Actual		YoY Changes	
	Amount	Ratio to Net Sales	Amount	Ratio to Net Sales	Amount	Ratio
Net Sales	11,677	100.0%	13,308	100.0%	1,631	14.0%
Gross Profit	1,653	14.2%	2,141	16.1%	488	29.5%
SG&A Expenses	1,235	10.6%	1,394	10.5%	158	12.9%
Operating Income	418	3.6%	747	5.6%	329	78.8%
Ordinary Income	389	3.3%	713	5.4%	324	83.2%
Net Income	228	2.0%	454	3.4%	226	99.0%

Source: Compiled by Trias Corporation from Company materials

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As for net sales by segment, as Table 2 indicates, the Semiconductor Business, which accounted for 94.1% of overall sales in 1H FY12/15, increased 13.8% YoY, while the Design Service Business also increased 17.0% YoY, both increasing sharply. The Design Service Business was strong overall, led mainly by medical equipment and industrial equipment.

In the Semiconductor Business, sales in mainstay FPGA products increased on the back of acquisition of new clients as well as sales in medical equipment, both triggered by the withdrawal of Tokyo Electron Device Ltd. (TSE 1st Section: 2760; hereinafter “TED”) from the market. Sales also increased in analog semiconductors and standard ICs for industrial equipment and measuring equipment, but decreased in ASSPs (application specific standard products) for computers and other applications.

● [Table 2] FY12/15 Sales Breakdown by Segment

(\$ million, %)	1H FY12/14		1H FY12/15		YoY Changes	
	Actual Net Sales	Composition Ratio	Actual Net Sales	Composition Ratio	Amount	Ratio
Semiconductor	11,009	94.3%	12,524	94.1%	1,515	13.8%
Design Service	602	5.2%	704	5.3%	102	17.0%
Other	66	0.5%	79	0.6%	13	20.3%
Total	11,677	100.0%	13,308	100.0%	1,631	14.0%

Source: Compiled by Trias Corporation from Company materials

Gross profit margin (GPM) increased from 14.2% in 1H FY12/14, to 16.1%. As shown in Table 3, foreign exchange impact from overseas procurements of semiconductors jumped from ¥(31) million in 1H FY12/14 to ¥356 million, and this resulted in the large growth in reported incomes. The adjusted GPM excluding this impact was 13.4%, declining 0.8 points YoY. This drop in profitability is mainly due to two factors: firstly, margins were low in FPGA sales accompanying the acquisition of TED commercial rights, as PALTEK was not involved in the Design In (products adopted through preproduction prototypes) or Design Win (products adopted through mass production) processes, and secondly, there were certain large-size transactions involving other semiconductors with low profitability.

● [Table 3] Impacts to Gross Profit from Forex Rate Changes

(\$ million, %)	1H FY12/14		1H FY12/15	
	Amount	Ratio to Net Sales	Amount	Ratio to Net Sales
Gross Profit	1,653	14.2%	2,141	16.1%
(Forex Impact)	(31)	-0.2%	356	2.7%
Gross Profit (Excluding Forex Impact)	1,684	14.4%	1,785	13.4%

Source: Compiled by Trias Corporation from Company materials

SG&A expenses increased ¥158 million YoY, comprised mostly of personnel expenses used in

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increasing development and sales personnel in advance of acquiring FPGA commercial rights.

Operating income was ¥747 million, up 78.8% YoY, however, operating income excluding foreign exchange impact was ¥391 million, a decline of 12.9% YoY. Operating income margin rose from 3.6% in 1H FY12/14 to 5.6%, but on an adjusted basis, posted a decline from 3.8% to 2.9% when excluding foreign exchange impact. Ordinary income and net income increased 83.2% and 99.0%, respectively.

As can be seen in Table 4, total assets increased ¥3,813 million, or 31% from FY12/14-end (Dec), largely on the back of acquiring commercial rights.

For assets, merchandise (inventories) increased ¥1,036 million, mostly consisting of products carried over from TED. Accounts receivable - trade increased ¥717 million. This increase can also be attributed to carrying over TED's clients, as certain clients have long payment terms. Accounts receivable - other, included in other current assets, posted a significant increase of ¥2,037 million. PALTEK's accounts receivable - other consists mostly of receivables associated to discounts of procurement of overseas products, and the significant increase posted in 1H FY12/15 was also due to receiving a large amount of dollar-denominated purchase discount credits near the end of Q2.

As for liabilities, accounts payable - trade increased ¥1,487 million on inventory preparations, and short-term loans payable increased ¥2,310 million to compensate for working capital necessary to handle the increase in accounts receivable - other. As previously disclosed, PALTEK procured funds through a short-term loan of ¥3,150 million after the end of Q2 (Jun). The Company mentions that this loan was secured with a view toward the expected increase in product procurement accompanying the acquisition of commercial rights. The Company established a commitment line of ¥10 billion at the beginning of FY12/15, and this loan is included in that amount. The loan balance currently stands at roughly ¥6.2 billion, and the dependency on loans among total assets is approximately 33%. Considering the Company was virtually debt-free until now, even with a slight deterioration in the balance sheet, its shareholders' equity ratio is still nearly 50%, and for the time being, there are likely no concerns regarding its financial position.

● [Table 4] Summary of 1H-End FY12/15 Consolidated Balance Sheet

(\$ million, %)	FY12/14	FY12/15	Changes	Major Factors
	Q4-end	Q2-end	Amount	
Cash and Deposits	2,058	1,999	(59)	
Accounts Receivable - Trade	4,496	5,214	717	Increased owing to net sales expansion
Merchandise	3,139	4,175	1,036	Increased in preparation for sales expansion
Other Current Assets	1,765	3,893	2,127	Significant increase in accounts receivable - other
Non-current Assets	577	568	(9)	
Total Assets	12,037	15,850	3,813	
Accounts Payable - Trade	784	2,271	1,487	Increased due to procuring inventory
Short-Term Loans Payable	780	3,090	2,310	Increased due to procuring working capital
Other Current Liabilities	1,398	1,348	(50)	
Non-current Liabilities	325	313	(12)	
Net Assets	8,748	8,827	78	
Total Liabilities and Net Assets	12,037	15,850	3,813	

Source: Compiled by Trias Corporation from Company materials

FY12/15 Consolidated Financial Forecasts

As can be seen from Table 5, for the full-year FY12/15 consolidated financial forecasts, the Company is guiding for net sales of ¥27.5 billion, and operating income of ¥1.2 billion, YoY increases of up 18.8% and up 19.0%, respectively, with net income to increase by 30.5% YoY.

Table 6 shows a comparison of revised forecasts on April 9 and August 5. From this it can be seen that net sales were revised up by ¥1,500 million and operating income was revised up by ¥150 million, however, just looking at the 2H, while net sales were revised up by ¥691 million, operating income was actually revised down by ¥48 million. According to the Company, this is due to factoring in sales of low-margin products carried over from TED continuing for some time, and the price decline trend for semiconductors overall.

● [Table 5] Summary of FY12/15 Consolidated Financial Forecasts

(\$ million, %)	FY12/14 Actual Composition		FY12/15 Forecasts Composition		YoY Changes	
	Amount	Ratio	Amount	Ratio	Amount	Ratio
Net Sales	23,156	100.0%	27,500	100.0%	4,344	18.8%
Gross Profit	3,713	16.0%	4,140	15.1%	426	11.5%
SG&A Expenses	2,705	11.7%	2,940	10.7%	235	8.7%
Operating Income	1,008	4.4%	1,200	4.4%	191	19.0%
Ordinary Income	1,052	4.5%	1,145	4.2%	92	8.8%
Net Income	563	2.4%	735	2.7%	172	30.5%

Source: Compiled by Trias Corporation from Company materials

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● [Table 6] Comparison of Revised Forecasts on April 9 and August 5

(\$ million)	Revised Forecast Apr 9			Revised Forecast Aug 5			1H Changes		Full Year Changes	
	1H	2H	Full Year	1H	2H	Full Year	Amount	Ratio	Amount	Ratio
Net Sales	12,500	13,500	26,000	13,308	14,191	27,500	808	6.5%	1,500	5.8%
Gross Profit	2,020	2,150	4,170	2,141	1,998	4,140	121	6.0%	(30)	-0.7%
GPM	16.2%	15.9%	16.0%	16.1%	14.1%	15.1%	—	-0.1pp	—	-0.9pp
SG&A Expenses	1,470	1,650	3,120	1,394	1,545	2,940	(75)	-5.2%	(180)	-5.8%
Operating Income	550	500	1,050	747	452	1,200	197	35.8%	150	14.3%
OIM	4.4%	3.7%	4.0%	5.6%	3.2%	4.4%	—	+1.2pp	—	+0.4pp
Ordinary Income	530	480	1,010	713	431	1,145	183	34.5%	135	13.4%
Net Income	325	300	625	454	280	735	129	39.7%	110	17.6%

Source: Compiled by Trias Corporation from Company materials

As can be seen from Table 7 which shows net sales forecasts by segment, the Company is guiding for Semiconductor Business net sales to increase by 18.0% YOY, and Design Service Business net sales to increase sharply by 29.7% YOY.

● [Table 7] Summary of Net Sales Forecasts by Segment

(\$ million, %)	FY12/14 Actual Composition		FY12/15 Forecast Composition		YoY Changes	
	Net Sales	Ratio	Net Sales	Ratio	Amount	Ratio
Semiconductor	21,898	94.6%	25,850	94.0%	3,952	18.0%
Design Service	1,118	4.8%	1,450	5.3%	332	29.7%
Other	139	0.6%	200	0.7%	61	43.9%
Total	23,155	100.0%	27,500	100.0%	4,345	18.8%

Source: Compiled by Trias Corporation from Company materials

Further, as can be seen from Table 8, for the Semiconductor Business, mainly due to the full contribution from the 2H of the portion from the commercial rights acquisition, the rate of growth of net sales is expected to rise sharply from up 13.8% in the 1H to up 22.4% in the 2H. Total net sales were revised up by ¥1,500 million from the April 9 forecast, and the main factors were an increase of ¥1,050 million for FPGA, and ¥430 million for Standard IC. According to the Company, this was due to the portion from the commercial rights acquisition for FPGA from TED being greater than expected, and for Standard IC, office equipment-related and product procurement from NXP Semiconductors and Microchip Technology were strong. Only ASSP ICs were revised down, due to broadband telecommunications equipment-related expected to decline.

● [Table 8] Comparison of Revised Forecasts on April 9 and August 5 (by Product)

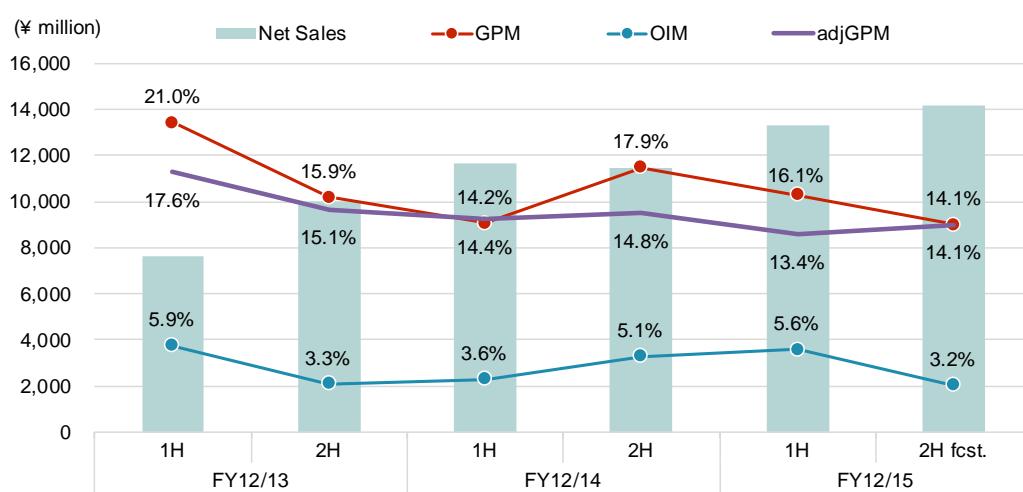
(\$ million)	Revised Forecasts Apr 9			Revised Forecasts Aug 5			1H Changes		Full Year Changes	
	1H	2H	Full Year	1H	2H	Full Year	Amount	Ratio	Amount	Ratio
Semiconductor	11,670	12,680	24,350	12,524	13,325	25,850	854	7.3%	1,500	6.2%
FPGA	4,750	6,200	10,950	5,334	6,665	12,000	584	12.3%	1,050	9.6%
ASSP	3,500	3,100	6,600	3,217	3,082	6,300	(282)	-8.1%	(300)	-4.5%
Standard IC	1,520	1,400	2,920	1,850	1,499	3,350	330	21.7%	430	14.7%
Analog	900	980	1,880	966	1,083	2,050	66	7.4%	170	9.0%
Memory	1,000	1,000	2,000	1,155	994	2,150	155	15.6%	150	7.5%
Design Service	750	700	1,450	704	745	1,450	(45)	-6.1%	0	0.0%
Other	80	120	200	79	120	200	(0)	-0.7%	0	0.0%
Total Net Sales	12,500	13,500	26,000	13,308	14,191	27,500	808	6.5%	1,500	5.8%
Operating Income	550	500	1,050	747	452	1,200	197	35.8%	150	14.3%

Source: Compiled by Trias Corporation from Company materials

The full-year forecast for GPM is 15.1%. Graph 1 shows the 6-month trend for GPM etc, and 2H GPM estimated to decline from 16.1% in the 1H to 14.1% in the 2H assumes no foreign exchange gain in the 2H. However, on an adjusted basis excluding the impact of foreign exchange gains, this is actually forecast to improve from the adjusted 1H level of 13.4%. In the 2H, low-margin large-size transaction sales of semiconductor products in the 1H disappear, boosting margins.

The Company is guiding for operating income to increase by 19.0% YoY, with increased sales of Semiconductor and Design Service Businesses contributing. The adjusted operating income margin excluding foreign exchange gains is 3.1%, rising from 2.9% last fiscal year. While Semiconductor Business profit/income margins are declining, the absolute level of profits excluding foreign exchange gains is expected to increase slightly YoY. As a result of the factors above, the Company is guiding for ordinary income and net income to increase by 8.8% and 30.5%, respectively.

● [Graph 1] 6-Month Trend of Net Sales, GPM and Operating Income



Source: Compiled by Trias Corporation from Company materials

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Topic 1: Impact of the Commercial Rights Acquisition from TED

In March of this year, TED exited FPGA sales from US firm Xilinx Inc. (NASDAQ:XLNX), and PALTEK acquired the commercial rights for some clients. For the time being transactions are likely to remain severe in terms of profitability and funding burden, however, there is major significance of having acquired major new clients, and this is likely to also have a positive benefit for business outside of FPGA sales. Table 9 summarizes the impacts from the commercial rights acquisition.

● [Table 9] Impact of the Commercial Rights Acquisition from TED

- | | |
|-----------------------------|---|
| • Contribution to net sales | Some ¥1.5 billion in FY12/15, and some ¥ 4.0 billion annually thereafter (estimated values) |
| • Contribution to incomes | Expecting to see low margins for the time being |
| • Funding | Expecting an increase in working capital for purchasing FPGAs |
| • Advantage | Expecting business expansion accompanying the acquisition of major clients |

Newly acquired clients by PALTEK include 10-plus firms including several major electronics manufacturers, estimated to be a transfer of annual sales worth roughly ¥4.0 billion. Considering Semiconductors sales for the Company last term were ¥21.8 billion, this works out to a nearly 20% increase relative to last fiscal year. According to the Company regarding net sales from the transfer portion this fiscal year, it booked ¥400 million in the Q2 (Apr-Jun), and estimates will be roughly ¥1.5 billion for the full year (Jan-Dec).

However, there are no grounds for optimism on profitability. First, since sales of the ¥1.0 billion portion of physical inventory purchased from TED in accordance with the transfer of commercial rights are simply margin spread transactions, gross margins are substantially lower than consolidated GPM of 13.4% in the 1H (adjusted for excluding foreign exchange gains). In addition, even after sales of that inventory, as long as sales of clients equipment using FPGA with the same specifications continue, PALTEK is still liable to continue supply. Even after sales become in-house products where the Company has a Design Win (adopted program is incorporated), it appears that it will not be easy to raise margins. As a result, for the Semiconductors Business, the situation of the increase in sales not translating to an increase in profits will likely continue for the time being.

The funding burden also increases. For FPGA procurement transactions, there is a special format employed where authorized sales agents in Japan initially make procurement at a high fixed price, then after sales are made, vendors rebate the difference with actual prices at the time of sale to sales agents. Therefore, large funding required for procurement cannot be recovered at the time of sale, and sales agents take on the funding burden for the difference. In addition, depending on the case, this can straddle the period from procurement to sale. Also, if the client payment cycle is long, collection can be further extended, and in some cases funding significantly larger than the value of sales can be locked

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in for a long period.

Actually, PALTEK Q1-end accounts receivable-trade and accounts receivable-other together increased by ¥2,755 million, and in order to secure working capital going forward, the Company borrowed ¥2,300 million during the Q2, raising this by ¥3,150 million in July. These loans were apparently procured on interest rates favorable to standard rates, however, even then the annual interest burden increases by over ¥50 million, which is not small compared with estimated net income of ¥735 million.

Accordingly, FPGA commercial rights acquired by PALTEK this time will not have a major benefit to profits for the time being. The reason the Company decided to go ahead with the acquisition anyway is the potential for success. By acquiring major new clients where it previously had no transactions, it expanded potential clients for sales in the Semiconductor Business other than FPGA, and the Design Service Business. Also, by becoming involved in the development process of these types of major manufacturers, it will be even easier than previously to capture trends in product development and new technologies. As the Company progresses with handling the transfer, it will gradually drive forward its proposal sales leveraging PALTEK technology support capability and system proposal capability, with a view toward expanding business with new clients.

Topic 2: Business Opportunities for PALTEK Created by Structural Change in the Semiconductor Market

Major structural change has begun in the global semiconductor market...

Coming into this year, there have been successive large-scale M&A transactions in the global semiconductor industry. Recently with signs of decline starting to appear for the consumer applications market including PCs and smart phones, a major structural change appears to be developing in the market. Here we look at the outlook for business opportunities for PALTEK, taking into consideration these market changes.

Table 10 summarizes large-scale M&A transactions announced this year in the semiconductor industry.

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● **[Table 10] Large-Scale M&A Transactions Announced in 2015 by Major Semiconductor Makers**

Acquiring Company	Acquired Company	Cost of Acquisition	Announced
NXP Semiconductors NV Head office: Netherlands/NASDAQ:NXPI	Freescale Semiconductor, Inc. Head office/NYSE:FSL	\$11.8 billion	March 2015
Avago Technologies Ltd. Head office: Singapore and USA/NASDAQ:AVGO	Broadcom Corporation Head office/NASDAQ:BRCM	\$37.0 billion	May 2015
Intel Corporation Head office: USA/NASDAQ:INTC	Altera Corporation Head office: USA/NASDAQ:ALTR	\$16.7 billion	June 2015

Source: Compiled by Trias based on various media and press information

This March, NXP Semiconductors N.V., a strategic supplier for PALTEK and a semiconductor maker with strength in the automotive field, announced that it would acquire Freescale Semiconductor Inc., which has strength in semiconductors for embedded systems in telecommunication and automotive applications. Then in May, Avago Technologies Ltd., which has at its origins US-based Agilent Technologies Inc. (NYSE: A)—a semiconductor specialist split off from US-based Hewlett-Packard Company (NYSE: HPQ)—and has strengths in telecommunications and enterprise storage, announced that it would acquire by the end of March 2016 Broadcom Corporation, a major maker of semiconductors for telecommunications equipment.

In June, Intel Corporation, the largest maker of CPUs for PCs and servers, announced that it had decided to acquire Altera Corporation, ranked no.2 in FPGA after Xilinx, PALTEK's leading vendor.

All of these are large-scale transactions over \$10 billion, however, as far as the acquisition of Broadcom Corporation by Avago Technologies is concerned, the deal size in Japanese yen is roughly ¥4.6 trillion, a massive investment overshadowing the initial investment stake in US telecom carrier Sprint Corporation (NYSE: S) by Softbank, which was ¥1.8 trillion.

Global semiconductor industry largely shifting course from the B2C market to the B2B market

Why are major semiconductor makers rushing to make these large-scale acquisitions? The background for this is that growth in PCs and TVs, applications which require numerous semiconductors, has stopped, and even demand for smart phones which had grown rapidly is showing signs of slowdown, and thus growth in the consumer market (B2C), which had accounted for a major proportion of semiconductor demand, is slowing.

Under this kind of environment, one application that is attracting attention in the semiconductor industry is IoT (Internet of Things), which is connecting everything to the Internet. In particular, large markets are estimated for the fields of autos and industrial machinery, medical equipment, electric

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power infrastructure etc, and each of these are basically in the B2B market, aiming at creating an efficient society. Also, what is demanded in each of these areas, rather than high performance functionality and simple cost reduction, is reliability, durability and low power consumption, a different and new technology development from the B2C market until now.

For example, the acquisition of Freescale Semiconductor by NXP Semiconductors is likely aimed at further strengthening its capabilities in the automotive field, and the acquisition of Broadcom Corporation by Avago Technologies is likely aimed at strategically strengthening its capabilities in telecommunications and IoT. Accordingly, toward commercialization in the IoT field, business development by one company alone is difficult, and collaboration with other semiconductor makers, as well as joint cooperation with makers from other industries and social infrastructure firms, is likely indispensable, and acquisitions and tie-ups in order to realize this are expected to increase going forward.

Features demanded from next generation systems for IoT globally

For IoT next-generation systems, rather than general versatility, highly efficient structure specialized in specific functionality is demanded. For example, for recently popular automated driving systems for autos, processed information is limited to vehicle position, distance from other vehicles, images of the surrounding, etc.

Similarly, in Germany's networking project for the manufacturing workplace being promoted at the national level, *Industry 4.0 (the 4th industrial revolution)*, supply chain information and utilization rates and status of progress of the front- and back-end manufacturing processes are linked by network, aiming at putting together a system that conducts optimal production in terms of both volume and cost.

For these systems, which are based on constantly changing information, how quickly and in real time coordination between equipment can be achieved is important, and if realization is attempted using current general purpose systems, there is a weak point that in some cases processing times are too long, and costs actually increase. The mainstream of current computer architecture is for processing that successively reads rewritable programs stored in memory.

Meanwhile, more recently, processing that immediately realizes specific functionality just from the output of an analog chip, completely without performing operational processing, is attracting attention. However, this requires a unique design for each separate application, which is inefficient and can't be applied to other fields, and this has singled out FPGA, which allows for free design of operational function through programs.

FPGA new growth applications field (1): Servers

The acquisition of Altera by Intel is likely aimed at strengthening its technology portfolio. Opinions of industry analysts about this acquisition are divided. There are negative opinions that Intel, which was late in semiconductors for smart phones and was forced into a corner with declining demand for PCs, used its abundant funding strength to make a purchase that doesn't really make sense. To be sure, the total global market for FPGA is roughly \$5 billion, and Altera sales are less than \$2 billion. This accounts for a mere 3.6% of Intel's overall net sales, which is roughly \$56 billion.

Nevertheless, regarding the acquisition, Intel emphasizes that "the FPGA market has potential to achieve 7% average annual growth." (source: Intel presentation materials *Acquisition of Altera* dated June 1, 2015) The first product is scheduled to be announced in the 2H of 2016, combining an in-house MPU with FPGA in one package, targeting the market for servers and other embedded systems, according to Intel. It appears Intel is also considering combining its low-end version MPU *Intel Atom* with FPGA.

Even now, server applications are a large demand area for FPGA. Used as a supplementary processor to the MPU, some estimates put the annual scale at \$1 billion, accounting for 20% of the total FPGA market. High growth is expected to continue in the server market on data processing shifting to the cloud, and going forward there are increased expectations for new uses of FPGA.

US Microsoft Corporation (NASDAQ: MSFT) is aggressive in this area, promoting trial use of FPGA in data center processing, last year announcing FPGA-equipped server *Catapult*. A prototype system using 1,632 FPGA units was developed, and the company is working to accelerate its in-house web search engine *Bing*.

In other areas, Baidu Inc. (NASDAQ: BIDU), the operator of China's largest search engine *Baidu*, and US Facebook Inc. (NASDAQ: FB) etc, extremely heavy users of servers, are also apparently considering introduction of similar systems. Accordingly, if demand for systems that reverse the master-servant relationship with MPUs takes off, there is potential for the FPGA server market to substantially exceed \$1 billion.

FPGA new growth applications field (2): Embedded Systems

Another area attracting attention is what Intel calls "other embedded systems," which likely has high awareness of IoT. Specific fields and applications have not been disclosed, however, the target here is substitution for application specific LSIs including ASICs (custom products) and ASSPs (standard products). The latent potential market includes image recognition and ADAS (advanced driving assist systems). Over the medium- to long-term, Intel sees a potential for market development to \$11 billion (roughly ¥1.4 trillion, source: Intel presentation materials *Acquisition of Altera* dated June 1, 2015).

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Through using FPGA in these fields, compared with ASICs, manufacture of chips with lower cost and low power consumption is possible, and updating or changing programs can be performed instantly. ASICs and ASSPs normally require a wafer process over 2 months in incorporating specific ICs, however since FPGAs only require embedding programs in existing chips, there is also a large benefit from significantly shortening the speed to market introduction. In addition to substitution for application specific LSIs, when IoT demand picks up, latent market potential for FPGA will likely expand sharply.

Xilinx efforts in the embedded systems application market

Against this backdrop, Xilinx, PALTEK's leading vendor and FPGA industry leader, through aggressive promotion of its first product on the *Extensible Processing Platform (EPP)** for embedded system applications, *Zynq™-7000 Family*, plans to develop the market for applications demanding high performance, specifically driving assist systems using image recognition, multi-function printers, FA equipment, broadcast cameras, surveillance systems, and aerospace and defense equipment.

*Note: Xilinx announced EPP in April 2010 as a platform targeting new embedded systems applications, combining FPGA technology with the hardware CPU core.

Devices based on EPP, in addition to incorporating features that could not be realized in conventional application specific ASICs and ASSPs, can integrate the various functions required for a system on a single chip. As a result, despite being a "2-chip solution" that combines a general purpose processor with specific ICs, high performance, low power consumption and low cost can be sought, simultaneously achieving FPGA flexibility and scalability, and ASIC equivalent performance and power consumption, along with ASSP ease of use. In addition, EPP architecture allows the work of logic IC designers and software engineers to proceed in parallel, giving the added benefit of raising development efficiency.

Accordingly, Xilinx has positioned the market for embedded systems applications as a strategic business area, promoting platform technology and development of new products.

Indications regarding PALTEK's growth strategy

In addition to positioning FPGA which has expectations for expanded applications as its core technology, PALTEK's strengths include its system proposal capability based on its wealth of technical support experience in industrial fields such as telecommunications and medical equipment in the B2B market. For example, while keeping up-to-date with advanced technologies and products in-line with the growth strategy of Xilinx, including the first Xilinx platform product *Zynq™-7000 Family* and new 20nm product *UltraScale™ Family*, PALTEK is strengthening its proposal sales to meet the more sophisticated needs of clients. Also, the Company added analog, memory and high-speed interfaces to FPGA, and by further combining this with design capability, the Company is making efforts to

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strengthen its technology support structure with PALTEK appeal.

Amidst major structural change in the global semiconductor market, systems with FPGA as the core are becoming massive in scale and more complex, and since development by single manufacturer clients has become difficult, projects with the major portion of development being consigned to PALTEK are increasing, according to the Company. Under these trends, business opportunities for the Company are expected to increase going forward, including other semiconductors and sensors surrounding FPGA.

In addition, as part of the Company's efforts to strengthen its development capability for next-generation systems including IoT, the Company is also involved in working to create new services by combining hardware and software. For example, for Design Service Business, the Company is strengthening ODM (Original Design Manufacturing: subcontracting from design to production under the client brand), which is not limited to one-off design. In the past, many consignment design orders were for prototype evaluation boards used in the product development process, however, now the Company is also involved in consignment design for inspection modules etc with a view toward mass production, and is searching for a business platform that covers the entire manufacturing process. In addition, from a longer-term perspective, through making its fledgling smart energy business IoT-compatible, there is also potential for establishing a new business model.

Under this type of business environment, President Yabuki believes that a finely tuned product lineup by field and application, including medical equipment application and automotive application in the core design base, will be required when IoT demand expands. PALTEK is already participating in an ADAS (advanced driving assist system) development project for a major automaker, making concrete efforts in the development of IoT systems, including strengthening its handling of infrared camera sensors. For reference, in the 1H alone, the Company has concluded sales agent contracts with multiple US vendors in rapid-fire succession, including infrared sensors and decision-making support databases.

Given the Company's business scale, although it is unknown as to what degree it can handle future market expansion, if demand for FPGA grows sharply, and new development companies are established in succession, the Company's roughly 40 development partner firms currently can be expected to grow further. ■

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Reference

● Consolidated Key Financial Data

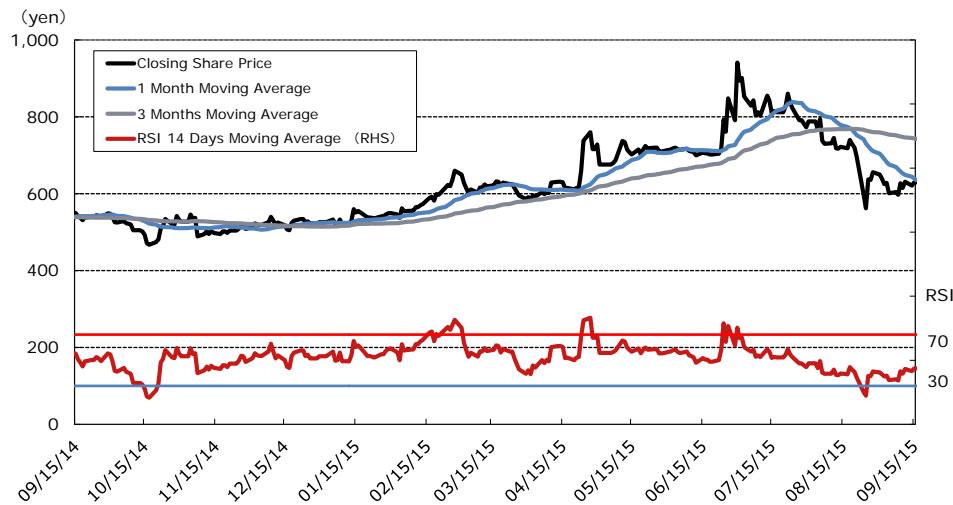
Consolidated (¥million)	Net Sales	Operating Income	Ordinary Income	Net Income	EPS (¥)	DPS(¥)
FY12/11	16,367	221	198	48	4.22	5.00
FY12/12	13,231	(317)	(185)	(106)	(9.33)	5.00
FY12/13	17,611	772	782	443	38.86	8.00
FY12/14	23,155	1,008	1,052	563	49.31	8.00
1H FY12/15	13,308	747	713	454	40.93	-
FY12/15 Forecasts	27,500	1,200	1,145	735	66.21	8.00

Note: FY12/15 forecasts announced on July 9, 2015 by the Company

● Consolidated Financial Results

No. of Shares Issued	Q2 FY12/15 end	11,849,899	Total Assets (¥million)	FY12/14 end	12,037
No. of Treasury Shares	Q2 FY12/15 end	895,537	Shareholders' Equity (¥million)	FY12/14 end	8,749
Market Value (¥million)	15-Sep-15	7,465	Interest-Bearing Debt (¥million)	FY12/14 end	780
BPS (¥)	FY12/14 end	766.18	Equity Ratio (%)	FY12/14 end	72.7
ROE (%)	FY12/14 end	6.6%	Ratio of Interest-Bearing Debt (%)	FY12/14 end	8.9
ROA (%)	FY12/14 end	4.7%	Free Cash Flows (¥million)	FY12/14	1,076
PER (times)	FY12/15 Fcst.	9.5	ROE=Current Net Income÷Averaged Shareholders' Equity		
PCFR (times)	FY12/14	12.1	ROA=Current Net Income÷Total Assets		
PBR (times)	FY12/14 end	0.8	PCFR=Maket Value÷(Current Net Income+Depreciation)		
Share Price (¥)	15-Sep-15	630	Ave. Daily Volume=ADV for the last 12 months		
Unit Share (shs)	15-Sep-15	100	Interest-Bearing Debts Ratio = I.B.D. ÷ Shareholders' Equity		
Average Daily Volume (shs)	15-Sep-15	51,499	Free Cash Flows=Operating CF+Investment CF		

● Share Price and RSI Charts (September 15, 2014-September 15, 2015)



Source : Prepared by Trias Corp. with Bloomberg data

Note : RSI (Relative Strength Index) is the index representing the ratio of overbought or oversold share prices.

In general, over 70 in RSI shows overbought share price range, while 30 shows oversold share price range.

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