

Section 57 of the Competition Act (Cap. 50B)

Grounds of Decision issued by the Commission

Notification for Decision: Proposed Acquisition of Solectron Corporation by Flextronics International

02 October 2007

Case number: CCS 400/005/07

Confidential information in the original version of this Decision has been redacted from published version on the public register. Redacted confidential information in the text of the published version of the Decision is denoted by [%].

I. INTRODUCTION

- 1. On 3 September 2007, the Commission received a notification for decision pertaining to a proposed acquisition by Flextronics International Ltd ("Flextronics") of Solectron Corporation ("Solectron") (collectively referred to as "the parties"), by way of a cash-and-stock deal.
- 2. The Commission has concluded that the proposed acquisition, if carried into effect, will not infringe the section 54 prohibition.

II. THE PARTIES

3. Flextronics, a company organized under the laws of Singapore, is a global provider of electronics manufacturing services ("EMS") to original equipment manufacturers ("OEMs"). It provides end-to-end, vertically integrated, global supply chain services, through which it designs, builds and ships a complete packaged product for its OEM customers. Its services include printed circuit board and flexible circuit fabrication, system assembly and manufacturing, logistics, after-sales services, design and engineering services, original design manufacturing services and components design and manufacturing.

Solectron, a corporation organized under the laws of Delaware, USA, 4. provides EMS to OEMs. Its services include product design, collaborative design, product launch/new product introduction. manufacturability ("DFX") services, printed circuit board assembly and subsystem manufacturing, systems integration and test, parts management. forward/reverse inventory management, logistics. recovery/remarketing and feedback to design and manufacturing for quality/serviceability.

III. THE MERGER

- 5. The proposed transaction concerns the acquisition of Solectron by Flextronics via Saturn Merger Corporation ("Saturn"), a newly organized and wholly-owned subsidiary of Flextronics. Pursuant to the Agreement and Plan of Merger between the parties, dated 4 June 2007, Saturn will merge with and into Solectron, which will survive the merger and become a wholly-owned subsidiary of Flextronics.
- 6. The proposed transaction therefore constitutes a merger under section 54(2)(b) of the Competition Act.

IV. RELEVANT MARKET

7. The parties submit that the relevant market for the purpose of this notification is that for the provision of EMS by and to OEMs. The word "by" here thus extends the proposed market definition to in-house production by the OEMs themselves. Based on 2006 statistics furnished by the parties, about 75% of all electronics manufacturing is still done in-house by OEMs. The parties further say that the geographic scope of the market is worldwide.

Product market

Parties' submission

- 8. The parties submit that the relevant product market is the provision of EMS by and to OEMs. The parties say that electronics products from OEMs' inhouse EMS are indistinguishable from those produced by third-party EMS providers, such as Flextronics or Solectron, to whom EMS production has been outsourced. As such, OEMs can easily shift production from a third-party EMS provider to in-house production, and vice versa. The parties thus say that that in-house EMS should be included in the product market definition.
- 9. EMS is provided to a variety of industry segments, such as computers, communications, consumer devices, automotive, medical device and

industrial segments. The parties argue there is strong supply-side substitution in EMS, as EMS providers use generic production lines that can easily be switched to produce and assemble products for different industry segments. Such switching, according to the parties, can happen at short notice and low cost. The parties thus argue that it is not appropriate to treat the different industry segments (in which EMS is provided) as separate product markets and that there exists a single market for EMS spanning across the different industry segments.

Commission's assessment

- 10. The question of whether the EMS product market includes in-house EMS production by OEMs can be left open, as the ultimate outcome of the competition analysis is the same regardless of whether it is included or not.
- 11. As regards the parties' claim that the product market should not be subdivided into the different industry segments, some of the responses to the Commission's investigations supported the parties in this respect. Commission was informed that EMS providers can switch from producing one type of electronic product to another within a matter of hours. The Commission's investigations indicated that before switching EMS providers, the customer would also look at factors such as technical capability and financial standing of the alternative supplier. Commission's investigations also indicated that while track record of the EMS provider was important, the customer nevertheless may, in response to a price increase of 5-10% by an incumbent EMS provider, still switch to a new EMS provider with no prior experience in the product line to which the customer belongs. After having considered the results of its investigations, the Commission is of the view that it is not necessary to determine whether the product market comprises a single market for EMS, or whether it should be subdivided into separate markets for each industry segment, as the ultimate outcome of the competition analysis is the same for both cases.

Geographic market

Parties' submission

12. The parties submit that the relevant geographic market is worldwide in scope, due to low cross-border barriers to trade, low shipping costs relative to price and similar product standards and specifications for products assembled by EMS providers worldwide. They argue that major EMS providers have plants in the Americas, Europe and Asia and, to satisfy customers' global requirements, EMS providers continually provide international services across borders and across continents.

Commission's assessment

13. The Commission's investigations have revealed that from Singapore's perspective, the market for the provision of EMS is worldwide. EMS providers have manufacturing facilities all over the world, and in shipping the product to customers, could pick the location that is most cost-effective or which best meets the customer's needs (e.g. in terms of timing). Given the global nature of outsourced OEM demand and of the EMS supply chain management (where products may or may not be consumed in the country where they are produced), it is not meaningful to identify Singapore as a distinct geographic market. The Commission's investigations also revealed that f.o.b. prices for EMS were largely the same across geographic boundaries.

V. COMPETITION ASSESSMENT

Market concentration

- 14. According to data for the year 2006, the combined shares of the parties for the worldwide market for the provision of EMS by and for OEMs is around [≫]% or [≫]%. If the market is defined as the worldwide market for the provision of third party EMS providers only (i.e. excluding in-house EMS by OEMs), the combined market shares of the parties is around [≫]% or [≫]% These market share thresholds fall well below the indicative thresholds in the CCS Guidelines.
- 15. The Commission also conducted an analysis on the product market definition where each industry segment to which EMS is provided constitutes a separate market. The market share figures for this market definition are as follows:

Worldwide EMS Segment Revenue Share by Vendor, 2006 1(%)

Vendor	Computer	Networking	Peripheral	Servers	Telecom	Consumer Devices	Automotive	Medical Device	Industrial
Hon Hai (Foxconn)	[50-60]	[1-10]	[1-10]	-		[35-45]	-	-	-
Sanmina - SCI	[5-15]	[1-10]	-	[10-20]	[10-20]	-	[1-10]	[5-15]	[1-10]
Flextronics	[1-10]		[10-20]		[20-30]	[10-20]	[1-10]	[1-10]	[1-10]
Solectron	[1-10]	[10-20]		[20-30]	[10-20]		[1-10]	A- 110	[1-10]
Universal Scientific Industrial	[1-10]	-	-	-		-	[5-15]	-	-
Jabil Circuit	-	[5-15]	[5-15]	[1-10]		[1-10]	[15-25]	[5-15]	[1-10]
Celestica	-	[10-20]	[1-10]	[10-20]	[5-15]	-	-	-	[1-10]
Venture	-	-	[5-15]	-		-	-	-	-
Benchmark Electronics	-	-	-	[5-15]		-	-	[1-10]	-
Elcoteq	-	-	-	- 1	[1-10]	[1-10]	-	-	-
Plexus	-	-	-	-		-	-	[1-10]	
Others	[15-25]	[40-50]	[40-50]	[20-30]	[10-20]	[15-25]	[35-45]	[55-65]	[65-75]
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

16. It can be seen that the combined market share figures for the provision of EMS to the telecommunications segment is [≫]%, which marginally crosses the indicative threshold of 40% in the CCS Guidelines. Despite this, the results of the Commission's investigations, detailed below, support the conclusion that the merger does not raise competition concerns.

Non-coordinated effects

- 17. As mentioned above, the responses to the Commission's investigations indicated that although the experience and technical capabilities of the EMS provider is important, customers may still switch EMS providers in response to a rise in price by their incumbent provider. This is so even if the alternative EMS provider has no prior experience in the customer's industry segment. The Commission's investigations also revealed that price competition amongst EMS providers is fierce. Furthermore, the OEMs themselves are able to resort to in-house EMS production.
- 18. The above factors tend to indicate strong buyer power on the part of OEMs, thus supporting a finding that non-coordinated effects are unlikely to arise as a result of the merger.

Coordinated effects

19. The Commission's investigations also revealed that fierce price competition between EMS providers has led to narrower margins. This in turn is attributable in part to the fierce price competition amongst OEMs (i.e. downstream of the EMS providers). Price pressures faced by the OEMs are translated into price pressures on the EMS providers who supply to the

¹ Based on data from the May 2007 report by IDC, "Worldwide Electronics Manufacturing Services Ouarterly and Full-Year 2006 Vendor Shares".

OEMs. Furthermore, barriers to entry into the EMS industry, as well as barriers to expansion in that industry, are low. ² Both these factors (competition in the OEM market and low entry and expansion barriers) mean that the likelihood of future collusion after the merger is low.

20. These factors thus support the finding that coordinated effects are unlikely to arise as a result of the merger.

Effect on Singapore

21. The inputs that the Commission has received through its investigations indicate that the merger is not likely to lead to a substantial lessening of competition in markets in Singapore.

VI. CONCLUSION

22. For the reasons stated above and based on the information available to the Commission, the Commission has assessed that the acquisition, if carried into effect, will not infringe the section 54 prohibition.

Foo Tuat Yien (Ms)
Acting Chief Executive

Competition Commission of Singapore

² E.g. Foxconn's share of the EMS market went from 10.1% in 2004 to 16.1% in 2006, while for that same period, Flextronics' share fell from 10.1% to 7.4%.