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(Acts whose publication is obligatory)

## COUNCIL REGULATION (EEC) No 577/91

of 4 March 1991

imposing a definitive anti-dumping duty on imports of certain types of electronic microcircuits known as EPROMs (erasable programmable read only memories) originating in Japan

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community,

Having regard to Council Regulation (EEC) No 2423/88 of 11 July 1988 on protection against dumped or subsidized imports from countries not members of the European Economic Community<sup>(1)</sup>, and in particular Articles 10 and 11 thereof,

Having regard to the proposal submitted by the Commission, after consultations within the Advisory Committee as provided for by the above Regulation,

Whereas :

## A. PROCEDURE

- (1) In December 1986, the Commission received a complaint lodged by the European Electronic Component Manufacturers' Association (EECA) allegedly on behalf of practically all actual or potential Community producers of EPROMs (erasable programmable read only memories). The complaint contained evidence of dumping of EPROMs originating in Japan and of substantial injury within the meaning of Article 4 (1) of Regulation (EEC) No 2423/88 resulting therefrom. This evidence was considered sufficient to justify the initiation of a proceeding.
- (2) The Commission accordingly announced, by a notice published in the *Official Journal of the European Communities*<sup>(2)</sup>, the initiation of an anti-dumping proceeding concerning imports into the Community of certain types of electronic micro-circuits known as EPROMs falling, at the same time of initiation, within subheading ex 85.21

D of the Common Customs Tariff and corresponding to NIMEXE codes ex 85.21-47, ex 85.21-69 and ex 85.21-71, originating in Japan, and commenced an investigation.

- (3) The Commission officially so advised the exporters and importers known to be concerned, the representatives of the exporting country and the complainants and gave the parties directly concerned the opportunity to make known their views in writing and to request a hearing.
- (4) Five Japanese exporters, their related importers in the Community and all complainant Community companies made their views known in writing. Two Japanese exporters decided, for commercial reasons, to refrain from cooperating with the Commission.
- (5) An additional Japanese exporter made itself known at a later stage and, together with the two above-mentioned Japanese exporters, submitted information at a later stage in the proceeding.
- (6) A submission was also made by one end user.
- (7) No submissions were made by independent importers.
- (8) The majority of Japanese exporters and their related importers in the Community, all complainant companies and a Community end user requested, and were granted, hearings.
- (9) The Commission sought and verified all information it deemed to be necessary for the purposes of a determination and carried out investigations at the premises of the following :
  - (a) Community complainant companies :
    - SGS Microelettronica SpA Italy (SGS),
    - Thomson Semiconducteurs, France (Thomson), which have subsequently merged into SGS-Thomson (ST);

<sup>(1)</sup> OJ No L 209, 2. 8. 1988, p. 1.

<sup>(2)</sup> OJ No C 101, 14. 4. 1987, p. 10.

## (b) Japanese producers/exporters :

- Fujitsu Ltd, Tokyo and Kawasaki (Fujitsu),
- Hitachi Ltd, Tokyo and Musashi (Hitachi),
- Mitsubishi Electric Corporation, Tokyo and Itami City, Osaka (Mitsubishi),
- NEC Corporation, Tokyo (NEC),
- Texas Instruments (Japan) Ltd, Tokyo (Texas);

## (c) Importers in the Community related to Japanese exporters :

- Fujitsu Microelektronik GmbH, Germany
- Fujitsu Microelektronik Ireland Ltd, Ireland,
- Hitachi Electronic Components (Europe) GmbH, Germany,
- Hitachi Electronic Components (UK) Ltd, United Kingdom,
- Hitachi Semiconductor (Europe) GmbH, Germany,
- Mitsubishi Electric (Europe) GmbH, Germany,
- Mitsubishi Electric (UK) Ltd, United Kingdom,
- NEC Electronics (Germany) GmbH, Germany,
- NEC Semiconductors (UK) Ltd, United Kingdom,
- NEC Ireland Ltd, Ireland,
- Texas Instruments Deutschland GmbH, Germany,
- Texas Instruments Italia SpA, Italy,
- Texas Instruments France SA, France;

## (d) End users :

- International Computers Ltd, United Kingdom.

- (10) The Commission requested, and received, further detailed written submissions from the complainant Community companies, the exporters and their related importers.
- (11) A submission prepared by a management consultancy firm was submitted by one Japanese exporter in respect of a study undertaken with regard to the issue of injury and Community interest relating to Japanese EPROMs.
- (12) These submissions were checked and analysed to the extent considered necessary.
- (13) The five Japanese exporters which cooperated in the investigation were informed of the Commission's findings and some commented both orally and in writing. These comments were duly considered.
- (14) The investigation of dumping covered the period April 1986 to March 1987. The examination of injury covered the years 1983 to 1987 as far as trends in volume, market shares and other economic factors were concerned and the year

1 April 1986 to 31 March 1987 for the detailed examination of price data.

- (15) Because of the complexity of the EPROMs industry, combined with the internationalization of manufacturing processes, this investigation has exceeded the normal time period.

## B. PRODUCTS UNDER INVESTIGATION, LIKE PRODUCTS AND COMMUNITY INDUSTRY

### (a) Products under investigation

- (16) The products under investigation are certain types of micro-circuits (EPROMs) including one-time programmable read only memories (OTPs)<sup>(1)</sup>, whether assembled in processed wafer or die form, manufactured using variations of metal oxide semiconductor (MOS) process technology including complementary MOS types (CMOS) and N-channel types (NMOS) of all densities irrespective of access speed, configuration, package or frame. As from 1 January 1990 EPROMs fall within the following CN codes :
  - 8542 11 63, 8542 11 65 and 8542 11 66 (finished EPROMs),
  - 8542 11 10 (wafers not yet cut into chips),
  - 8542 11 30 (chips), and
  - 8542 11 76 (OTPs).
- (17) The Commission also requested information in respect of EPROMs assembled in third countries from processed wafers and dice produced in Japan for subsequent importation into the EC. The information gathered revealed that the quantities of such products imported into the EC at the time were relatively small. It was, therefore, decided not to investigate the assembly operations of such imports.

<sup>(1)</sup> EPROMs are used primarily for the programme storage function in electronic digital computing circuits. Microprocessors and central processing units for larger computers cannot function without a minimal set of preprogrammed digital instructions. These types of core instructions reside normally permanently in non-volatile memories such as EPROMs. EPROMs are either programmed by the supplier or by the user and the programme can be erased by the application of UV light through a window embedded in the ceramic case and can subsequently be re-programmed. OTPs are basically identical, they contain an identical die as the corresponding EPROM device, and have the same pinout and function, except that, once programmed, the programme cannot be erased because the less costly plastic package of an OTP does not permit the installation of a window for the application of UV light.

**(b) Like product determination**

Community through the related companies' sales network.

(18) In order to reach a determination in respect of like products in this proceeding, the Commission examined whether:

- (i) processed wafers and dice are like finished EPROMs;
- (ii) different densities and processes of EPROMs constitute different like products;

ad (i) *Processed wafers and dice*

(19) Several exporters argue that processed wafers and dice resulting therefrom are not like products to finished EPROMs. Although they believe that different types of EPROMs are best viewed as a family of distinct but interrelated products, they argue that a processed die without its casing and electrical connections is of no value since the casing and electrical connections are essential if the die is to be functional.

(20) Complainants argue that processed wafers and dice are like products to finished EPROMs since they are merely unpackaged EPROMs which embody the essential identity of the product. They further argue that failure to include unfinished forms of EPROMs within the scope of any anti-dumping measures would create a major loophole, since Japanese companies could simply ship the wafers and dice to the Community, assemble them there and then sell the finished EPROM on the open market.

(21) The Council notes that:

- once a wafer is processed or diffused, the dice contained therein have all the essential electronic properties which distinguish EPROMs from other products,
- there is virtually no separate merchant market for EPROMs wafers and dice,
- the processed dice are dedicated to a single use as the memory storage unit in a finished EPROM. In fact, certain Japanese exported large quantities of processed dice generally on pre-cut wafers to related companies in the EC for testing and assembly before entering the finished product into the commerce of the

(22) On the basis of the foregoing, it is determined that processed EPROM wafers and dice are like products to finished EPROMs.

ad (ii) *Different densities and processes of EPROMs*

(23) Most Japanese exporters argue that different densities and processes of EPROMs are to be regarded as separate like products and that these different types of EPROM are best viewed as a family of distinct but interrelated products. In view of this, it was further argued that anti-dumping duties which might be imposed need to be separately assessed for each different type of EPROM and that differentiating between different densities and technologies is necessary if appropriate consideration is to be given to injury and Community interest questions. The consequence of this position, it was maintained, is that any EPROMs of higher than one megabit density which are allegedly not included in the complaint and were not produced during the period under investigation and therefore not investigated would be outside the scope of any anti-dumping duties which might be imposed.

(24) Some Japanese exporters further argue that new generation EPROMs of more than one megabit density cannot be regarded as like products to current EPROMs due to:

- the different design environment and manufacturing technology,
- new plants and the necessity of new equipment for manufacturing,
- new architecture and different application.

(25) The complainants argue that the differing densities and process technologies do not result in the formation of a different like product. They maintain that the distinctions drawn by certain exporters would yield an analysis of numerous artificial industries, splintering a widely recognized product and production category. They further argued that to define different products on the basis of density or the improvement or relatively minor variations of the production process would elevate minor differences in characteristics and uses above major identities when none of these distinctions warrants the creation of a separate like product.

The Council notes that :

- (26) — through the effects of a continuous learning process and refinements in technology, smaller, more dense, complex and higher performance memory circuits have been possible. In fact, since the introduction of EPROMs in the early seventies, successive generation EPROMs representing a quadrupling or doubling of memory capacity over the previous generation are being introduced approximately every three to four years. The investigation has revealed that in 1984, the 64K EPROM was the most sold generation in the Community, which had largely displaced the 16K and 32K EPROM while the 256K EPROM was first being introduced. In 1986, however, the 256K EPROM was sold in significant quantities gradually displacing the 64K EPROM with the 512K and one megabit generations starting to be introduced,
  
- (27) — in addition, EPROMs of different densities and processes all fall within the same general category of products which perform the same basic function regardless of the size of memory. Although design and process technology have changed over the successive generations of density, the essential characteristic of an EPROM, its memory function, has remained the same. Furthermore its essential physical characteristics have also remained the same.
  
- (28) — although different densities of EPROMs are not necessarily interchangeable from a practical point of view, end-use products (computers, etc.) are redesigned or conceived to accommodate higher density EPROMs in order to save space on circuit boards and manufacturing costs. In view of this generational shift in both EPROM capacity and end-use designs, the pricing of successive generations of EPROMs is closely linked. In this respect, it has been alleged by several parties involved in the proceeding that the introduction of a larger capacity EPROM will start to depress prices of the smaller size EPROM as soon as the larger capacity EPROM is priced at a certain level in relation to the smaller size EPROM.
  
- (29) Taking the foregoing into consideration, it is considered that the similarities of EPROMs of different densities and processes outweigh their differences in memory capacity, design and process technology. In conclusion, it is determined that EPROMs

of different densities and processes are like products.

#### *Future densities of EPROMs*

- (30) It has also been considered whether future densities of EPROMs e.g. two and four megabits should be regarded as like products. It is noted that during the period under investigation there were no imports of densities above one megabit, although certain complainant companies and Japanese exporters were already carrying out research into such products.

It is also noted that the notice initiating this proceeding refers to all densities of EPROMs.

On the basis of the information available with respect to current density and future density EPROMs, in particular with regard to technical specifications and application, it is considered that all densities of EPROM including future densities are one like product.

- (31) *Flash EPROMs*

After the investigation period, a new product variation, so-called 'flash' EPROMs, started to come onto the market. Most Japanese exporters argue that this product variation should be considered as an electrically erasable read only memory (EPROM) which is not subject to this anti-dumping procedure. The complainant companies are of the view that the technical properties of a flash EPROM are basically the same as EPROMs and should thus be considered as like products.

It has to be noted that in effect EPROMs are not considered as like products and are excluded from this procedure. From the technical information at hand it can be concluded that flash EPROMs, despite being electrically erasable, are built on EPROM and not on EPROM cell structure and are assembled into EPROM/OTP packages and have the same pinout as the latter. Furthermore, flash EPROMs generally substitute EPROMs. For these reasons a flash EPROM if it is based on EPROM technology is considered to be a like product to EPROMs.

- (32) *Products intended for military applications*

One exporter argued that EPROMs intended for military applications should not be regarded as the same like product as commercial EPROMs and in consequence should not be covered by the proceeding

It is noted that, notwithstanding any differences in customs treatment, EPROMs for military applications are standard EPROMs which undergo severe

testing and that such products are used equally for civil applications which require high performance and reliability (satellites, etc.).

In conclusion, it is determined that EPROMs for military applications and EPROMs for commercial applications are one like product.

**(c) Community industry**

- (33) In relation to the determination of the like product, it had to be defined for the purposes of the injury determination in accordance with Article 4 (5) of Regulation 2423/88 which companies constitute the Community industry. To this end, the following were analysed :

- (i) the manufacturing processes involved in EPROM production ;
- (ii) EPROM related activities of those Community companies which made themselves known during the proceeding.

- (34) ad (i) With regard to the manufacturing processes involved in EPROM production, it is noted that production can roughly be divided into two major phases :

- wafer diffusion and sorting (also referred to as front-end operations): where dice are produced on the silicon wafer and each die on the wafer is tested in order to mark defects. Wafer diffusion is technologically the most demanding production step which involves considerable investment both in basic research and in developing the highly sophisticated manufacturing technology. Once the wafer is processed, all essential characteristics of the finished product are already contained on the die found thereon,
- assembly and final testing: where the dice contained on the wafer are cut wire bonded, encapsulated into ceramic or other packages and finally tested before shipment. This production step (also referred to as back-end operations), is technologically less demanding and requires relatively modest capital investment in research and development. However, as a ratio of total cost of production, assembly costs are generally significant, and may even exceed in some cases wafer diffusion costs.

- (35) ad (ii) With regard to EPROM activities of those Community companies which made themselves known during the proceeding, it is

noted that, setting aside the two complainant companies (currently one following the merger of SGS and Thomson), three companies related to Japanese exporters imported wafers and dice during the period under investigation which were then assembled by the into EPROMs in the Community.

- (36) Wafer diffusion is from a technological and capital investment point of view more significant than the assembly and testing operations, but assembly and testing operations can account for a significant part of the cost of manufacture.

- (37) However, it can be left open whether companies performing assembly or testing operations only belong to the Community EPROM industry.

- (38) Even if companies performing assembly or testing operations only were part of the Community EPROM industry, it has to be considered whether, pursuant to the first indent of Article 4 (5) of Regulation (EEC) 2423/88, those companies related to Japanese exporters which themselves import the products under investigation should be excluded from the definition of Community industry. In this respect, the fact has been taken into consideration that those companies that import and assemble in the Community wafers and dice originating in Japan sell the finished product through the same corporate sales channels as direct imports of EPROMs originating from the same Japanese exporter and that the pricing of finished EPROMs, whether assembled in the Community or exported directly from Japan, is controlled by the same Japanese parent company. Furthermore, any dumping by the Japanese exporter influences the condition of the related assembling company, since it benefits directly or indirectly from the unfair practice. Under these circumstances, it is considered that those companies which import wafers and dice for assembly in the Community from related Japanese exporters should be excluded from the Community producers representing the Community industry.

**Arguments concerning the definition of Community industry**

- (39) Several Japanese exporters argue that they cannot accept that the complainants represent practically all actual or potential Community producers of EPROMs as the notice of initiation of the anti-dumping proceeding states. They submitted that since the technology for manufacturing EPROM wafers and dice can be purchased from numerous sources, any large-scale European electronic

components manufacturer is a potential Community producer of EPROMs. They also argue that, since assembly and testing account for a significant part of the production costs of an EPROM, those companies performing assembly operations in the Community should be included in the definition of Community industry. They support this point by submitting that, since under the legislation applicable at that time, assembly operations were sufficient to confer Community origin on the products assembled in the Community, it would be more appropriate to define Community industry in terms of products which had their origin within the Community.

- (40) In response to these arguments, it has to be pointed out that following the publication of the notice of initiation, no parties came forward, other than the two complainant companies and some assembling companies related to Japanese exporters, claiming that they were actual or potential producers of EPROMs and that in consequence Community industry should be interpreted so as to include them. In this respect, the Council is of the view that companies that may be technically capable of producing EPROMs are not to be regarded as potential producers unless they have committed themselves in some way to future EPROM production.

As for the Japanese-related companies which import wafers and dice for assembly in the Community, the Council refers to recitals 36, 37 and 38.

- (41) In conclusion, the term 'Community industry' is interpreted as referring to the complainant companies represented by the BECA, i.e. SGS and Thomson.

### C. NORMAL VALUE

- (42) With a view to determining normal values for the device types exported to, and sold in, the Community, prices and costs on the Japanese market were analysed. This analysis revealed that prices for the 128K, 256K, 512K and 1M densities were declining over the period under investigation while for the 16K, 32K and 64K densities which are products at the end of their life cycles, prices were stable or slightly increasing. With regard to costs, information on a quarterly basis revealed that, in

general, costs for all densities declined over the period but that for some quarters costs were higher than in the preceding quarter due to a lower production Costs costs for the 64K were increasing slightly in the last quarter as production volumes were being reduced.

- (43) For each exporter, prices were compared with the weighted average costs of production. This revealed that, for most exporters and for many device types, costs of production were, not only for substantial quantities but also on a weighted average basis, higher than domestic prices. The sales pertaining to these EPROM devices were therefore, pursuant to Article 2 (4) of Regulation (EEC) No 2423/88, considered as not having been made in the ordinary course of trade. For those device types sold at a loss, normal value was constructed. For the profitable EPROM devices sold on the domestic market, the domestic prices were used as the basis for the normal value determination where the sales volume involved exceeded 5 % of the sales volume in the Community.

Where the sales volume on the Japanese market was 5 % or below, normal value was also constructed. In adopting this approach, it was considered, in accordance with past practice, that a sales volume not exceeding the 5 % threshold is insufficient to permit a proper comparison.

- (44) For exports of EPROM dice on pre-cut wafer, already cut EPROM dice or untested EPROM devices, normal values were also constructed, since these products were not sold on the Japanese market.

- (45) Constructed values were determined by adding cost of production and a reasonable margin of profit. The cost of production was computed on the basis of all costs, both fixed and variable, incurred in Japan, of materials and manufacture to which was added a reasonable amount for selling, administrative and other general expenses and profit.

- (46) As regards the amounts of selling, administrative and other general expenses to be included in such constructed values, these were calculated on the basis of the expenses actually incurred by the exporter concerned; the amounts of profit to be included in such constructed values were calculated on the basis of profits realized by the exporter concerned on its profitable sales of EPROMs on the domestic market during the period under investigation.

(47) Cost of production was established by examining the economic entity of the exporter with regard to its activities on the Japanese market. That is to say, they were computed on the basis of the full costs of the parent/manufacturing company and the full costs of any sales subsidiaries or related companies performing the function of a sales department for the parent company. In this case, transactions between the parent/manufacturing company and its sales company were disregarded and transactions by the sales company to independent customers were taken into consideration for normal value purposes.

(48) Where costs had to be allocated to several products in order to compute costs relating to EPROMs, the accounting practice of the exporter was generally accepted as being reasonable. However, following investigations at the exporters' premises, initial responses to the Commission's questionnaire were, in practically all cases, either revised or complemented by information. In addition, modifications were made for certain exporters in respect of the following:

(49) *Research and Development expenses (R & D)*

All R & D expenses incurred in the period of investigation which related in any way to EPROM products, be it current or future products, have been appropriately allocated to the EPROM cost of production incurred during the period of investigation. For some exporters, certain R & D expenses declared have been amended following a more precise allocation for the expense in question.

In one particular case, the allocation made by the exporter resulted in MOS products other than EPROMs incurring R & D expenses significantly greater than EPROMs. On the basis of an analysis undertaken by the Commission with reference to R & D expenses incurred by other parties involved in the proceeding, and taking into consideration the importance of EPROM products as a technology driver for other MOS products, it has been decided to allocate the R & D expenses declared in total for MOS products to EPROMs on the basis of a turnover allocation.

**Arguments concerning the normal value determination**

(50) Some exporters argue that the normal value should be determined on the basis of the prices actually paid, or payable, on the domestic market on the grounds that, although sales of some devices may have been made at a loss, all costs would have been recovered, albeit over a period longer than the

investigation period, and therefore the prices should be regarded as being in the ordinary course of trade.

(51) The Council cannot accept this argument. It considers that, since the investigation period covers a whole year, EPROM devices sold at prices which did not permit recovery of all costs reasonably allocated within this period can reasonably be regarded as not having been made in the ordinary course of trade pursuant to Article 2 (4) (b) of Regulation (EEC) No 2423/88.

(52) Another exporter argues that there is a need to take account of the specific and unusual situation of the EPROM industry in which products become rapidly outdated and costs of production decline sharply over a short period.

It further argues that prices have been changing both during and since the investigation period and accordingly, were a single normal value to be determined for the one-year investigation period and compared with export prices transaction by transaction over the same period, the results obtained would bear no relation to the market situation during that period. This exporter therefore proposed that, in accordance with the requirement in Article 2 (9) of Regulation (EEC) No 2423/88 that normal value and export price be determined as nearly as possible at the same time, the comparisons between normal value and export price be made on a quarterly basis. This proposal would therefore require the establishment of quarterly normal values.

(53) The Commission, following analysis of the specific and unusual situation of the EPROM industry, took the view in the early stages of the proceeding that normal values should be established on a quarterly basis in order to reach a more precise dumping calculation. For this reason, the Commission requested in its questionnaires the submission of data on a quarterly basis. When, on analysis of this data, it became apparent that normal value for most EPROM devices would have to be constructed on the basis of costs of production, it had to take into consideration when examining all exporters' submissions, the volatility of costs, the absence of cost data for some devices and some quarters due to non-production and the difficulties in relating actual costs to individual sales transactions. For these reasons, the Council concludes that it would be more reasonable to determine normal values on an annual basis. In so doing, the Council considers that the results obtained reflect the market situation during the period under investigation.

### Reasonable profit

- (54) Several exporters argue that the margin of profit calculated by the Commission by reference to those EPROM devices which yielded a profit over the period under investigation is unreasonable in the light of the depressed state of demand at the time.

Another exporter argued that the calculation based on a weighted average of all profitable device types sold on the domestic market excluded device types sold at a loss, and that a fair and representative 'reasonable profit' should be calculated on sales both at a profit and at a loss.

It was further argued that it is misleading to view any given generation of memory in isolation or at a snapshot point in time and that it would give a more realistic picture if profitability were evaluated over complete life cycles of products as well as for EPROMs generally.

- (55) When constructing normal values, the Council has to determine a reasonable margin of profit to add to cost of production. Article 2 (3) (b) (ii) of Regulation (EEC) No 2423/88 provides the basis for reaching a reasonable profit, i.e. 'by reference to ... the profit realized by the producer or exporter on the profitable sales of like products on the domestic market'.

Accordingly, profitable sales were determined as described at recital 43. Where, following this approach, sales have been determined profitable over the said period, individual sales may have been made at a loss, provided that sufficient sales at a profit led to an overall profit being realized for the period.

This approach is considered reasonable and the results obtained are not viewed as being unreliable. The fact that they differ from exporter to exporter reflects the particular competitive position and pricing policy of each exporter.

### D. EXPORT PRICE

- (56) All five exporters which had responded to the Commission's questionnaire within the time limits laid down sold finished EPROMs to independent customers in the Community through Community-based sales subsidiaries. All five exporters shipped finished EPROMs to the Community from Japan. Three exporters shipped, in addition, wafers and dice for further processing in manufacturing

subsidiaries in the Community prior to sale in the finished state via the sales subsidiaries. Several exporters made direct sales of finished EPROMs to independent importers in the Community in addition to sales via their sales subsidiaries. Some exporters made sales of EPROMs, although representing small quantities, intended for export to the Community via non-related Japanese purchase offices of Community companies.

- (57) With regard to exporters by Japanese producers directly to independent importers in the EC and to independent purchasers in Japan (Japanese purchase offices) export prices were determined on the basis of the prices actually paid, or payable, for the products sold.

- (58) In all other cases, i.e. where exports were made to subsidiary companies which imported the product into the EC, it was considered appropriate in view of the relationship between exporter and importer to construct export prices on the basis of prices at which the finished products were first resold to independent purchasers in the EC. For this calculation, it was necessary to separate:

- (i) EPROMs that were exported in a finished state and sold to independent purchasers in the same state; from
- (ii) EPROMs exported for further processing in the Community and subsequently sold in a finished state.

For some exporters which assembled or further processed in the Community, it was not possible to identify with any precision sales of the finished EPROMs according to whether they were exported in the same state from Japan or assembled or further processed in the Community from wafers or dice. In this case, the sales quantities of the finished EPROMs were separated on the basis of the ratio between the quantities of finished EPROMs and the quantities of EPROMs for assembly or further processing imported into the Community.

- ad (i) Constructed cif Community border export prices for finished products were reached by deducting from resale prices to independent purchasers all costs incurred by the sales subsidiary between importation and resale including duties and taxes and a reasonable profit margin. In the absence of cooperation from independent importers, the profit margin was, on the basis of experience, assessed at 5 % on sales turnover.



ad (ii) Constructed cif Community border export prices for unfinished products were reached by deducting from resale prices to independent purchasers, as a first step, the costs and the profit margin determined for the sales subsidiary and, as a second step, all costs incurred by the manufacturing subsidiary for the assembly of further processing operations. No additional profit margin was attributed to the manufacturing subsidiary.

- (59) Some export transactions relating to certain device types were neglected either because the quantities involved were *de minimis* or because no reliable information was available to establish a normal value. It is considered that this approach has had a negligible impact on the dumping findings.

#### Arguments concerning the determination of export prices

- (60) One exporter argues that a 'reasonable profit' margin for its importing subsidiaries in the Community is less than the 5 % used.
- (61) The Council considers that actual profits or losses realized by an exporter's subsidiaries which perform *inter alia* the function of an importer in the Community cannot be taken into consideration because such profits or losses are influenced by the relationship between exporting and importing companies. Based on experience, a 5 % profit margin is considered reasonable for an independent importer dealing in products similar to that under investigation.
- (62) Another exporter argues that the methodology used by the Commission to construct export prices for wafers and dice from prices of the finished EPROMs to independent purchasers in the EC is extremely unfair. It claimed that the only result of its decision to invest in European EPROM production facilities has been that its dumping margin is considerably higher than it would have been if it had not manufactured within the EC.
- (63) Without prejudice to the merits of this exporter's decision to invest in European production facilities, the Council considers that the methodology adopted to construct export prices for wafers and dice is reasonable since it involves making an allowance for all costs incurred between importation and resale and for a reasonable profit in accor-

dance with Article 2 (8) (b) of Regulation (EEC) No 2423/88.

The fact that the costs incurred by this exporter in the Community were high compared to those incurred in Japan does not invalidate the methodology used. Furthermore, other exporters with assembly operations in the Community have not contested the methodology.

#### E. COMPARISON

- (64) For the purposes of a fair comparison between normal value and export prices, account had to be taken, where appropriate, of differences affecting price comparability, such as differences in physical characteristics, import charges and indirect taxes and differences in directly related selling costs where claims for these differences in the sales under consideration were made. All comparisons were made at ex works level.

- (65) As regards physical characteristics, EPROM devices on the basis of the following technical characteristics and specifications were isolated:

- by product group, i.e. assembled EPROMs, processed wafers or processed dice,
- by density,
- by process, e.g. CMOS and NMOS including shrunk die versions,
- by package material (ceramic or plastic, etc.),
- by type of packaging (DIP, LCC, SOP, etc.),
- by speed grade (access time),
- by lead frame coating,
- by configuration.

The export price of a product isolated in accordance with these characteristics and specifications was, therefore, easily compared with the normal value for an identical product.

- (66) As regards allowances for directly related selling costs, adjustments were made for differences in:
- transport, insurance, handling, loading and ancillary costs,
  - packing,
  - payment terms,
  - warranties, guarantees, technical assistance and other after sales services,
  - salesmen's salaries and commissions.

- (67) In view of the relatively minor adjustments claimed for comparison purposes and the complexities of the investigation in other areas, the claims made by exporters were accepted without detailed verification except in those cases where it was evident from the submissions that expenses claimed for allowances were not directly related costs. This was particularly the case for intra-company transport and insurance costs, and salaries of staff alleged to be salesmen. In some cases, claims were made for patent fees. However, since the adjustment in question affected equally both normal and export price and therefore has had no impact on the dumping calculation, no adjustment was deemed appropriate.

#### F. MARGINS

- (68) Normal value for each of the devices of each exporter was compared with export prices of comparable devices on a transaction-by-transaction basis. The examination of the facts shows the existence of dumping in respect of imports of EPROMs originating in Japan from all the Japanese producers/exporters investigated, namely Fujitsu Limited, Hitachi Ltd, Mitsubishi Electric Corporation, NEC Corporation, and Texas Instruments (Japan) Ltd, the margin of dumping being equal to the amount by which the normal value as established exceeds the price for export to the Community.

The margins of dumping varied according to exporter and for each exporter according to importing Member State, EPROM device and customer. The weighted average margins of the exporters named above when expressed as a percentage of the cif Community border price vary between 35 and 106 %.

- (69) For those exporters which did not reply to the Commission's questionnaire, dumping was determined on the basis of the facts available in accordance with the provisions of Article 7 (7) (b) of Regulation (EEC) No 2423/88.

In this connection, it was considered that the results of the investigation provided the most appropriate basis for determination of the margin of dumping and that it would create an opportunity for circumvention of the duty to hold that the dumping margin for these exporters was any lower than the highest dumping margin of 106 % determined with regard to an exporter which had co-operated in the investigation. For these reasons, it is considered appropriate to use this latter dumping margin for this group of exporters.

#### G. INJURY

##### (a) Development and present state of the Community industry

- (70) The Commission received and verified detailed information on the EPROM activities of the complainant companies constituting the Community industry.

This information has revealed that there are two complainant companies, SGS of Italy and Thomson of France, which merged their semiconductor activities after the investigation period.

- (71) One company entered the semiconductor business by acquiring, in 1983, a company which had previously been a subsidiary of two other companies. EPROM products were available in this acquired company in NMOS 16K, 32K and 64K densities, and in CMOS 16K and 32K densities. The company decided to increase its EPROM business activities and initiated a major R&D programme at the beginning of 1984 to develop new products in both NMOS (64K, 128K, 256K) and CMOS (64K) as well as new technologies. By the end of that year, total EPROM sales resulting from these developments were expected, for the period 1985 to 1987, to be considerable. However, these sales forecasts were never achieved.

— Delays which had occurred in starting the 64K DRAM production affected the development of 64K EPROMs, consequently wafers for 64K EPROMs had to be purchased from a third country supplier for assembly by this company in the EC.

— Market conditions forced this company to further review its R&D programme particularly in the light of massive losses on its EPROM sales. The company was prevented from entering into full fabrication of certain higher density NMOS products and had to discontinue any further work on NMOS technology. The CMOS development was continued but suffered cutbacks during 1986 due to the continuing low price levels.

- (72) The other company has been producing EPROMs in the EC from the early 1980s. During the investigation period a wide range of EPROMs, including the 16K, 32K, 64K, 128K, 256K and 512K densities, were produced in significant volume.

From 1983 to 1985, production was exclusively carried out in an existing production facility. In late 1983 this company adopted a plan providing for the building of a more advanced production line

which was primarily intended for large volume production of 64K and 256K devices and it was scheduled that by the end of 1986 the new production line would be operating at full capacity. Due to a dramatic price depression for EPROMs on both the EC and world markets, this company had to postpone the full implementation of this plan on several occasions and a full capacity ramp-up could only be achieved by the end of 1988 instead of the end of 1986 as provided for in the initial plan, thus having caused a delay of about two years, and significantly contributing to the considerable losses and lack of return on investment suffered by this company.

#### (b) Status of the Community industry

- (73) From the foregoing it is apparent that both complainant companies have been producing and selling EPROMs in considerable quantities prior to, and during, the investigation period in and outside the EC. This is not seriously contested by the Japanese exporters. Thus it is considered that the Community EPROM industry, as represented by the complainant companies, is an established industry.

#### Injury factors

##### (a) Volume and market shares of imports of EPROMs of Japanese origin

- (74) No precise figures concerning total imports and total consumption were available. However, on the basis of information obtained from parties involved in the proceeding and from a number of other sources, the Commission was able to assess in a reasonable manner consumption in the EC. This revealed that EPROM consumption increased considerably from 1984 (29,9 million units) to 1986 (33,2 million units), decreasing in 1987 (28,8 million units). In the same period, Japanese sales in the EC increased from around 6 million units in 1983 to 15,6 million units in 1987, peaking at 26,2 million units in 1986. This development represents an increase of market share held by Japanese producers from 71 % in 1984 to 79 % in 1986, and a decrease in 1987 to 54 %. It should be noted that these figures are based on EPROM units and it is considered that, since demand is for memory capacity, a more precise method would be to calculate the number of bits of memory capacity according to the memory density of individual units. The information available, however, did not permit this calculation over the whole period concerned. The information does suggest that the consumption in 1987, when expressed in memory bits, was higher than that shown on a unit basis and that the market share of the Japanese producers was also higher. Sales of EPROMs of Japanese

origin in the EC measured in memory bits showed a significant increase from 1984 to 1986, i.e.

- 1984 : 1,2 million megabits,
- 1985 : 1,8 million megabits,
- 1986 : 3,0 million megabits.

- (75) It came to light during the investigation that a possible grey market existed for EPROM products in view of the fact that EPROM prices for certain devices were alleged to be somewhat lower in Japan than in the EC. It has not been possible to quantify such sales but, on the information available, it is believed that the quantities involved were relatively small. In any case, whatever the quantities may have been, their inclusion in the calculations would lead to an increase in the market share held by Japanese products.

##### (b) Prices

- (76) The Commission's analysis of EPROM prices revealed that on the EC and world markets prices decreased significantly prior to and during the period under investigation. Only at the end of this period did prices stabilize or, for some devices, slightly increase. Further analysis revealed that this acute price decline was greater than could be expected from economies of scale and the learning curve effect well known to this industry. In fact, prices of Japanese EPROMs were generally at levels below production costs.

##### (c) Other relevant economic factors

- (77) It was found that for one complainant company production decreased, both in unit and cumulative capacity terms, over the period from 1984 through the investigation period. For the other complainant company, however, production increased over this period.
- (78) As regards capacity utilization by the complainant companies, it was found that a significant reduction had occurred at both complainant companies between 1984 and the investigation period.
- (79) It was established that stocks increased dramatically at both complainant companies between 1984 and the investigation period, both in unit terms as in terms of cumulative memory capacity.
- (80) Concerning EPROM turnover of the two complainant companies, it was found that it has decreased significantly for both complainant companies over the time span between 1984 and the investigation period. It is furthermore worthwhile mentioning that even the complainant company, which could significantly increase its EPROM sales over the period referred to above both in unit and cumulative memory capacity terms, nevertheless suffered a decrease in EPROM turnover.

- (81) As regards the profit and loss situation of the EC EPROM manufacturers, it has been established that they suffered heavy losses during the period from 1985 to 1987 peaking in 1986 as a result of the depressed market prices.

(d) *Conclusion*

- (82) The facts referred to above show that, following the significant increase of Japanese EPROM imports and sales, combined with rapidly declining prices, the Community industry was not in a position fully to use capacity and benefit from economies of scale; turnover decreased and stocks increased. This resulted in considerable financial losses and lack or delay of return on investment.

**H. CAUSATION OF INJURY BY THE DUMPED IMPORTS**

(a) **Effects of dumped imports and other factors**

- (83) The Japanese producers/exporters claim that their dumped imports were not the cause of the price depression on the EC EPROM market but that they had to meet existing market conditions. It has been established that, for the last four years, Japan has been by far the most significant exporter of EPROMs to the Community, steadily increasing its market share at the expense of the Community producers and American exporters. Furthermore, the Japanese producers/exporters hold a similar position on the world market. Therefore, it can be assumed that the Japanese exporters/producers acted as price leaders.
- (84) The Japanese producers/exporters further claim that the injury caused to the Community EPROM producers was not brought about by the depressed market prices but by other factors such as late market entry, poor performance on non-price factors, inappropriate strategy and management, structural and technical problems. While it is true that the Community producers were relatively late

entrants and were primarily active in the market segment for lower and medium density EPROMs, it has to be noted that both complainant companies had well established sales relationships with a significant number of major EPROM consumers, which suggests that performance, strategy and management and product quality met the expectations of these consumers.

- (85) Some Japanese producers/exporters argue that the complainant companies neglected their EPROM business in order to produce more profitable products in the facilities built for EPROMs. The investigation did not, however, produce any evidence supporting this argument.

(b) **Conclusions**

- (86) The foregoing has led the Council to determine that the effects of dumped imports of EPROMs originating in Japan, taken in isolation, have to be considered as causing material injury to the Community EPROM industry.

**I. COMMUNITY INTEREST**

- (87) In assessing whether it is in the interest of the Community to take measures against dumped imports of EPROMs from Japan which have been shown to cause injury to the complainant Community industry, the Council has taken into consideration the benefits derived from mass EPROM production, and the particular situation of the Community EPROM industry and user industries.

With regard to the benefits derived from mass EPROM production, the Council is of the view that a viable Community EPROM industry will contribute to a strong Community electronics industry overall. First, EPROMs serve as a technology driver for other more complex semiconductor devices. Second, the semiconductor industry of which EPROMs are a part is a strategic industry in that semiconductors are a key component for the data processing, telecommunications and automotive industries.

Third, the use of the most advanced technology in EPROM production not only improves the competitiveness of this industry but also that of the downstream electronics industry. Fourth, a strong Community EPROM industry will continue to provide an alternative source of supply to the Community electronics industry thereby reducing dependence on the Japanese producers of EPROMs. This latter aspect is considered essential, given the fact that Japanese producers are generally vertically integrated and also manufacture the end products which compete with those produced by the Community electronics industry.

As regards the particular situation of the Community EPROM industry, it has to be noted that the two complainant companies which have subsequently merged their EPROM activities have been well established EPROM producers for a long time, offering a great variety of product subtypes and continually maintaining a high degree of investment in R&D, plant facilities and equipment. This state of affairs renders it particularly vulnerable to any renewed dumping practices and it requires a certain degree of reliance on fair market conditions for the future.

In the light of the findings relating to the investigation period, it can be foreseen that reoccurrence of dumping by the Japanese exporters and the resulting negative consequences for the financial status of the European producers would force the latter to discontinue their EPROM production. This would give the Japanese exporters an even more dominant position on the EC market and thus reduce competition to an extent incompatible with the interests of the Community.

#### Arguments concerning Community interest

(88) Most parties involved in the proceeding submitted arguments on whether the imposition of anti-dumping duties or other measures are in the interest of the Community. Nearly all Japanese exporters argue against the imposition of duties. The arguments made by them are in most cases variations of a smaller number of core arguments which are itemized below:

- the imposition of anti-dumping duties would not be in the Community interest because they would raise the average prices of EPROM products in the EC thereby adversely affecting the competitive position of certain high-technology industries and undermining efforts to make such industries more competitive,

- US and other non-European producers will benefit from such higher prices far more than the complainants,
- higher prices would encourage some EPROM users to consider moving parts of their operations overseas,
- the complainants' market share would not increase significantly because they are likely to be uncompetitive on costs and non-price factors.

(89) BECA, representing the complainants, argues that the taking of measures is in the interest of the Community on the grounds that:

- manufacturing skills in semiconductor technology are crucial for a strong European electronics industry as a whole, since the EPROM is a major semiconductor technology driver and the semiconductor industry is a strategic industry,
- without viable semiconductor production, competitiveness of European producers of other electronic products will be endangered and will remain at a technological disadvantage compared to Japanese producers,
- the European electronics industry must have a local source of supply and be enabled to co-operate with Community semiconductor producers in order to develop new, competitive electronic products. All major Japanese semiconductor producers are vertically integrated and also compete with European user industries. Not to safeguard a viable Community EPROM industry would mean to restrict EC users to foreign sources of supply,
- without European EPROM producers, competition would be reduced and a strong market force would disappear, so that third country producers would be able to dictate the types of product to be supplied as well as their prices.

(90) The Council has taken account of all the views advanced.

(91) In the first instance, the Council recognizes the importance of a strong Community electronics industry for the Community industry generally and the strategic role played by EPROMs in this respect as a product at the leading edge of technology. Community action in the field of research and development projects such as Jessi are evidence of this recognition. Such action is taken to improve the competitiveness of an industry on the general understanding that it will be able to operate in a fair market environment.

(92) Second, as to the arguments raised by exporters concerning the negative impact of higher prices on the EC market resulting from the imposition of

anti-dumping duties, it cannot be accepted that advantages gained in the past through unfair dumping practices can now be invoked as a justification for not taking the necessary steps to establish a fair trading situation.

- (93) As to the argument that the cost of anti-dumping duties to the EPROM consuming industries would be completely disproportionate to any benefit which might result for the complainants, the Council points to the fact that the cost of EPROMs is generally quite small if compared to the cost of the final product manufactured by the user industries. Therefore, there is nothing which could suggest that the cost of anti-dumping measures would be disproportionate for the user industries. In this connection, it is significant that this argument was not raised by an EPROM user.
- (94) As to the argument that the US and other non-European producers will benefit from higher prices of EPROMs more than the complainants as a result of a switch in demand, no conclusive evidence has been submitted and it can only be remarked that appropriate action would be taken should it become evident that such suppliers dump.
- (95) In conclusion, after having considered the various arguments of all interested parties, the Council considers that the Community interest calls for granting protection to the Community EPROM industry to ensure that it can develop in a fair market environment. However, given the particular characteristics of the EPROM industry characterized by short life cycle products, volatile and rapidly declining costs and prices and the price development since the period under investigation, it is considered that in the interest of the Community, the necessary protection should be given by means of a measure which could be suitably tailored to follow the dynamics of the EPROM industry without causing unnecessary hindrance to the user industries.

## J. MEASURES

### Price undertakings

- (96) By Decision 99/131/EEC<sup>(1)</sup>, the Commission has accepted, in accordance with Article 10 (3) of Regulation (EEC) No 2423/88, undertakings offered by each of the following Japanese exporters:

- Fujitsu Ltd,
- Hitachi Ltd,
- Mitsubishi Electric Corp.,
- NEC Corp.,
- Sharp Corp.,
- Texas Instruments (Japan) Ltd, and,
- Toshiba Corp.

### Duty

- (97) On the basis of the information available, the Council believes that the exporters which have offered undertakings currently represent practically all Japanese EPROM producers which export EPROMs to the EC. However, in order to safeguard the effectiveness of the undertakings by covering *inter alia* 'grey market' sales to the EC, known to exist for this product, a definitive anti-dumping duty should be imposed.
- (98) Given that, in order to avoid circumvention, such duty to be imposed should be at a level equal to the highest dumping margin found for an exporter cooperating in the proceeding but lower were a lesser duty adequate to remove the injury, the Commission quantified the injury caused to the complainant companies by dumped imports from Japan in the following manner:

Japanese weighted average resale prices of specific EPROM types were compared with the costs of production of the same types which the complainant companies manufactured and sold in the EC.

A profit margin has been added to these cost figures to take into account *inter alia* new research and development programmes and investment required for the necessary machinery capable of operation on the basis of a lower micron technology. Guided by the results of a study prepared by the University of Munich on necessary profit levels for the Community DRAM industry, which is considered to be broadly similar to the EPROM industry in this respect, a margin of 25 % on cost of production was considered reasonable in these circumstances.

In all cases, the comparison of the EC companies' costs, increased by the profit margin referred to above, with each Japanese exporter's resale price for the given product revealed that the latter was considerably lower. The difference was calculated for each type and density, weighted by the exporter's sales quantities in the EC and expressed finally as a percentage of the cif value for the same quantities used in the calculation.

<sup>(1)</sup> See page 42 of this Official Journal.

The result of this operation shows that while the dumping margins established for all but one Japanese exporter, when expressed as a percentage of cif value, are considerably lower than the percentage required to eliminate injury, the latter percentage remains below the level of the highest dumping margin found. For the exporter with the highest dumping margin a duty of 94 % on cif value would, therefore, be sufficient to eliminate the injury caused to the Community EPROM industry.

- (99) In the light of these circumstances, the duty should be in the form of an *ad valorem* duty and the rate should be 94 % of the net free-at-Community border price before duty.
- (100) In view of the fact that the undertakings offered by the exporters named at recital 96 have been accepted by the Commission, these exporters can be excluded from the scope of application of the duty on imports of EPROMs originating in Japan,

HAS ADOPTED THIS REGULATION:

#### Article 1

1. A definitive anti-dumping duty is hereby imposed on imports of certain types of electronic micro-circuits known as EPROMs (erasable programmable read only memories) falling within CN codes ex 8542 11 10, ex 8542 11 30, 8542 11 63 or 8542 11 65 or 8542 11 66 and ex 8542 11 76 (for Taric and additional codes see Annex II), originating in Japan.

2. For the purpose of this Regulation, EPROMs comprise all types including one time programmable read only memories (OTP) and flash EPROMs if based on EPROM technology of all densities in finished and unfinished forms such as wafers and dice (mounted or unmounted).

3. The rate of the duty shall be 94 % of the net free-at-Community-frontier price before duty.

4. Products referred to in paragraph 1 shall be exempt from the duty, provided that:

- they are produced and exported to the EC by the following companies which have given an undertaking

which is accepted pursuant to Article 1 of Decision 91/131/EEC:

- Fujitsu Ltd,
- Hitachi Ltd,
- Mitsubishi Electric Corp.,
- NEC Corp.,
- Sharp Corp.,
- Texas Instruments (Japan) Ltd and
- Toshiba Corp., or that

- they are produced by one of the companies listed in the first indent and exported to the Community by one of its affiliated companies listed in Annex I, or that

- they are produced, and sold for export to the Community, by one of the companies listed in the first indent: in this case, exemption from the duty shall be conditional upon presentation to the customs authorities of documentation from the producer confirming that it sold the products for which the exemption is sought for export to the Community; the documentation (the format of which is contained in Annex III) must contain a clear description of the device type(s) sold, the total quantity per device type, the unit price per device type, or a statement that the price was not lower than the applicable reference price, the invoice number and the confirmation that these products were produced and sold for export to the EC by the said company under the undertakings referred to in Article 1 of Decision 91/131/EEC, or that the following conditions are fulfilled:

- the date of order confirmation to the first independent purchaser for the products in question is prior to the entry into force of this Regulation, and
- effective delivery of these goods to the first independent purchaser occurred not later than the quarter (31 March, 30 June, 30 September, 31 December) following the quarter during which this Regulation entered into force, and
- the products in question were produced by one of the companies listed in the first indent.

5. The provisions in force concerning customs duties shall apply.

#### Article 2

This Regulation shall enter into force on the day following its publication in the *Official Journal of the European Communities*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 4 March 1991.

*For the Council*

*The President*

J. F. POOS

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## ANNEX I

**List of companies affiliated to producers named in the first indent of Article 1 (4) of the Regulation***Companies affiliated to Fujitsu Ltd, Japan :*

- Fujitsu Microelectronics Inc., USA,
- Fujitsu Microelectronics Pacific Asia Ltd, Hong Kong,
- Fujitsu Microelectronics Asia Pte Ltd, Singapore,
- Fujitsu Microelectronics (Malaysia) Sdn Bhd, Malaysia,
- Fujitsu Devices Singapore Pte Ltd, Singapore.

*Companies affiliated to Hitachi Ltd, Japan :*

- Hitachi America, Ltd, USA,
- Hitachi Semiconductor (America) Inc., USA,
- Hitachi (Canadian) Ltd, Canada,
- Hitachi Asia Pte Ltd, Singapore, Malaysia, Indonesia,
- Hitachi Asia (Hong Kong) Ltd, Hong Kong, South Korea, China, Taiwan,
- Hitachi Semiconductor Technology (Malaysia) Sdn Bhd, Malaysia,
- Hitachi Australia Ltd, Australia,
- Nissei Sangyo Co. Ltd, Japan, Hong Kong, Taiwan, Australia,
- Nissei Sangyo America Ltd, USA,
- Nissei Sangyo (Singapour) Pte Ltd, Singapore,
- Hitachi Micro Devices Ltd, Japan,
- Hitachi Electronic Components Sales Co. Ltd, Japan,
- Hitachi Semiconductor (Malaysia) Sdn Bhd, Malaysia,
- Hitachi Semiconductor (Penang) Sdn Bhd, Malaysia,
- Hitachi Semiconductor (Kedah) Sdn Bhd, Malaysia.

*Companies affiliated to Mitsubishi Electric Corporation, Japan :*

- Mitsubishi Electronics America Inc., USA,
- Mitsubishi Semiconductor America Inc., USA,
- Mitsubishi Electric (H.K.) Ltd, Hong Kong,
- Melco-Taiwan Co. Ltd, Taiwan,
- Melco Sales Singapour Pte Ltd, Singapore,
- Mitsubishi Electric Australia Pty Ltd, Australia.

*Unternehmen der Gruppe Sharp Corporation :*

- Sharp Electronics Corporation, USA,
- Sharp Microelectronics Technology, USA,
- Sharp Digital information Products, USA,
- Sharp Electronics of Canada Ltd, Canada,
- Sharp Electronics (Svenska) AB, Sweden,
- Sharp Electronics GmbH, Austria,
- Sharp Electronics AG, Switzerland,
- Sharp-Roxy Sales Pte, Ltd, Singapore,
- Sharp Electronics Pte, Ltd, Singapore,
- Sharp Roxy Sales & Service Company, Malaysia,
- Sharp Roxy Ltd, Hong Kong,
- Sharp Korea Corporation, South Korea,
- Sharp (Phils) Corporation, Philippines,
- Sharp Thebnakorn Co. Ltd, Thailand,
- Sharp Electronics Co. Ltd, Taiwan.

*Companies affiliated to Texas Instruments (Japan) Ltd :*

- Texas Instruments, Inc., USA,
- Texas Instruments Pte Ltd, Singapore,
- KTI Semiconductor Limited, Japan,
- Texas Instruments International Trade Corp. (Sverigefilialen), Sweden.

*Companies affiliated to Toshiba Corporation :*

- Toshiba America Electronic Components, Inc., USA,
- Toshiba Electronics Scandinavia AB, Sweden.

*Companies affiliated to NEC Corporation :*

- NEC Electronics Inc., USA,
- NEC Electronics Pte Ltd, Singapore,
- NEC Electronics Ltd, Hong Kong,
- NEC Electronics Australia Pte Ltd, Australia,
- NEC Semiconductors Sdn Bhd, Malaysia,
- NEC Electronics Taiwan Ltd, Taiwan.

## ANNEX II

## Taric and additional codes

Additional codes	Firms/rate
8491	Fujitsu Limited Hitachi Limited Mitsubishi Electric Corporation NEC Corporation Sharp Corporation Texas Instruments (Japan) Ltd and Toshiba Corporation No anti-dumping duty <sup>(1)</sup>
8492	Other: 94 %

<sup>(1)</sup> Also included here are the affiliated companies in Annex I mentioned in Annex I and other companies complying with the conditions in the third indent of Article 1 (4) of the Regulation.

CN code	Taric code
ex 8542 11 10	8542 11 10*30
ex 8542 11 30	8542 11 30*50
ex 8542 11 76	8542 11 76*05
	8542 11 76*06
	8542 11 76*07
	8542 11 76*08
	8542 11 76*14
	8542 11 76*15
	8542 11 76*17
	8542 11 76*18
	8542 11 76*20
	8542 11 76*21
	8542 11 76*91

*ANNEX III*

Certification document pursuant to the third indent of Article 1 (4) of this Regulation

<b>1</b> Exporter (Name and full address)	<b>DOCUMENTATION</b> <b>FOR IMPORT OF EPROMs</b> <b>IN THE EUROPEAN COMMUNITY</b>		
<b>2</b> Consignee (Name and full address)	<b>3</b> ISSUING COMPANY (Name and full address)		
<b>NOTE</b> This documentation must be presented to the competent customs office in the European Community together with the entry for free circulation relating to the products	<b>4</b> Invoice number(s)		
<b>5</b> Description of the device type(s)	<b>6</b> Total quantity per device type	<b>7</b> Unit price per device type	
<b>8</b> This is to confirm that the products shown above were produced and sold for export to the European Community by the company shown in box 3 under the undertaking referred to in Regulation (EEC) No 577/91.			
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">           Place and date :             .....         </div> <div style="width: 45%;">           Signature :             .....         </div> </div>			
<b>9</b> For use by competent customs office in the European Community			