

## **Commonly Not Controlled** **Integrated Circuits, Electronic Components and Equipment**

Taking into account the revisions brought about by the Import and Export (Strategic Commodities) Regulations (Amendment of Schedule 1) Order 2004, the following is a list of integrated circuits, electronic components and equipment which are normally not subject to the import/export licensing control as stipulated in the Import and Export (Strategic Commodities) Regulations unless they are to be used in any activity related to nuclear, chemical or biological weapons, or missiles capable of delivering these weapons—

- (A) Electronic components such as low energy storage capacitors, resistors, diodes, thyristors and microwave transistors with operating frequencies not exceeding 3.2 GHz
- (B) Integrated circuits, not designed or rated as radiation hardened, as follows -

*Note :* There is no limit on the operating ambient temperature for integrated circuits described in this section

- (1) power amplifier integrated circuits with operating frequencies not exceeding 3 GHz, as follows :
  - (a) operational amplifiers
  - (b) isolation amplifiers
  - (c) instrumentation amplifiers
  - (d) audio amplifiers
- (2) voltage integrated circuits, as follows :
  - (a) voltage comparators
  - (b) voltage references
  - (c) voltage regulators
- (3) storage integrated circuits, not manufactured from a compound semiconductor, as follows :
  - (a) dynamic random access memories (DRAM) including Fast Page RAM, EDO-RAM, SDRAM and SGRAM
  - (b) unprogrammed ultra-violet erasable programmable read-only memories (UV-EPROM)
- (4) 74-series, 54-series and 4000-eries logic integrated circuits
- (5) integrated circuits designed or programmed for civil car electronics only (e.g., entertainment, instrumentation, safety, comfort, operations or pollution)

- (6) integrated circuits designed or programmed for home electronics only (e.g., audio and video equipment, appliances, safety, education, comfort, remote controlled toys or amusement)
  - (7) integrated circuits designed or programmed for time-keeping applications only (e.g., watches, clocks)
- (C) Silicon-based integrated circuits, not designed or rated as radiation hardened and not rated for operation at an ambient temperature below  $-55^{\circ}\text{C}$ , above  $+125^{\circ}\text{C}$  or over the entire range from  $-55^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ , as follows :
- (1) microprocessor integrated circuits as follows :
    - (a) Intel processors such as Celeron, Celeron M, Pentium III, Pentium III M, Pentium III Xeon, Pentium 4, Pentium M, Itanium, Itanium 2 and Xeon etc., irrespective of the clock frequency
    - (b) AMD processors such as Duron, Athlon 4, Athlon MP, Athlon XP, Athlon XP-M etc., irrespective of the clock frequency (except Opteron which is still under controlled)
    - (c) Motorola processors (except security processors that should be assessed on cryptographic capability)
    - (d) PowerPC G3, G4 and G5, irrespective of the clock frequency
  - (2) storage integrated circuits not manufactured from a compound semiconductor, as follows :
    - (a) unprogrammed electrical erasable programmable read-only memories (EEPROM)
    - (b) flash memories;
    - (c) static random-access memories (SRAM)
  - (3) analogue-to-digital converter integrated circuits, as follows :
    - (a) resolution  $< 8$  bit
    - (b) conversion time  $\geq 5$  ns for  $8 \text{ bit} \leq \text{resolution} < 12$  bit
    - (c) conversion time  $\geq 20$  ns for resolution = 12 bit
    - (d) conversion time  $\geq 200$  ns for  $12 \text{ bit} < \text{resolution} \leq 14$  bit
    - (e) conversion time  $\geq 1$   $\mu\text{s}$  for resolution  $> 14$  bit
  - (4) digital-to-analogue converter integrated circuits satisfying any of the following :
    - (a) resolution  $< 12$  bit; *or*
    - (b) settling time  $\geq 10$  ns
  - (5) Field programmable logic devices that having all of the following:

- (a) An equivalent usable gate count  $\leq 30\,000$  (2 input gates)
  - (b) A typical basic gate propagation delay time  $\geq 0.1$  ns
  - (c) A toggle frequency  $\leq 133$  MHz
- (D) Specially designed components, integrated circuits or modules for use in the telecommunications equipment, such as for FM/AM radio integrated circuits, integrated communications microprocessors, digital fast light communication laser modules, digital subscriber line transceivers and communication controllers of WAN, LAN, ATM, T1, T3, E1, E3 or ADSL lines.
- (E) General purpose electronic equipment
- (1) Digital video magnetic tape recorders specially designed for television recording for civil television applications
  - (2) Radio frequency signal analysers with operating frequencies  $\leq 31.8$  GHz
  - (3) Typical frequency synthesised signal generators with maximum synthesised frequency  $\leq 31.8$  GHz
  - (4) Network analysers with a maximum operating frequency  $\leq 43.5$  GHz
  - (5) Microwave test receivers with maximum operating frequency  $\leq 43.5$  GHz

- Remarks :*
1. The above list does not include optical or photosensitive integrated circuits and electronic components
  2. The above list includes packaged integrated circuits and unencapsulated dices. For unencapsulated dices, they must have defined pattern, in which the function have been determined

*Note :* The above list is indicative rather than exhaustive and should not be regarded as official classification rulings. Exporters should refer to the above-mentioned Schedule for full details. This list no longer applies if the commodities concerned are specially designed or modified for military, nuclear or aerospace applications, or for other strategic commodities controlled by Schedule 1.

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