

2. Responsible Western representatives of the supplier will:
 - a. Have the right of access to the "computer using facility" and all equipment, wherever located, during normal working hours and at any other time the equipment is operating; *and*
 - b. Be furnished information demonstrating continued authorised application of the equipment; *and*
 - c. These Western representatives will be notified of any significant change of application or of other facts, on which the licence was based;
 - b. A full description of:
 1. The equipment; *and*
 2. Its intended application and workload; *and*
 - c. A complete identification of all end-users and their activities;
2. The requesting Government will in all cases:
 - a. Promptly report to the Committee evidence of:
 1. Any violation of the conditions of this Note; *or*
 2. Any removal or diversion of the equipment from authorised purposes, related to the specific export licence; *and*
 - b. In such cases, immediately terminate to the extent possible and in accordance with their legislation, all further shipments of equipment and spare parts, technology and "software" therefor by the supplier to the specified end-user(s);
- i. The Committee will:
 1. Approve the export of equipment described in this Note if no member country has filed an objection within four weeks of the receipt of complete information on the case; *and*
 2. Consider, when assessing proposed exports and the comments of member countries on such proposed exports:
 - a. The appropriateness of the equipment to the stated end-use;
 - b. Any evidence which would indicate that the proposed end-users are:
 1. Directly involved in significant strategic, including intelligence, activities; *or*
 2. Affiliated with organisations that foster diversion to strategic purposes;
 - c. The extent to which the equipment will support the strategic activities of the end-users; *and*
 - d. The extent to which diversion would disrupt the activities of the proposed end-users.
4. Governments may permit, as administrative exceptions, the shipment to the People's Republic of China of "digital computers", specially designed components and related equipment therefor, embargoed by 1041.3.c., e., f., h., i., j. or k., or "software" embargoed by 1044.1., provided:
 - a. They will be operated by civil end-users for civil applications;
 - b. They are exported as complete systems or enhancements to previously exported systems up to the limits in Note 4.d.;
 - c. They have been primarily designed and used for non-strategic applications;
 - d. The "CTP" of the "digital computers" does not exceed 20 Mtops; *and*
 - e. Any embargoed "software" is the minimum required for the "use" of the approved "digital computers" and related equipment.

1040. Technical Note:

"COMPOSITE THEORETICAL PERFORMANCE" (CTP)

Abbreviations used in this Technical Note

- CE "computing element" (typically an arithmetic logical unit)
- FP floating point
- XP fixed point
- t execution time
- XOR exclusive OR
- CPU central processing unit
- TP theoretical performance (of a single CE)
- CTP "composite theoretical performance" (multiple CEs)
- R effective calculating rate

Execution time 't' is expressed in microseconds, and CTP is expressed in Mtops (millions of theoretical operations per second).

CTP is a measure of computational performance given in millions of theoretical operations per second (Mtops). In calculating the "Composite Theoretical Performance" (CTP) of a configuration of Computing Elements (CEs) the following three steps are required:

1. Calculate the effective calculating rate R for each CE;
2. Apply the word length adjustment to this rate, resulting in a Theoretical Performance (TP) for each CE. Select the maximum resulting value of TP;
3. If there is more than one "computing element", combine the TPs resulting in a "Composite Theoretical Performance" for the configuration.

Note:

This aggregation should not be applied to computers connected through a decontrolled "local area network".

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The following table shows the method of calculating the Effective Calculating Rate R for each Computing Element:

For Computing Elements (CEs) Implementing:	Effective calculating Rate, R
XP only (R_{xp})	$\frac{1}{3 * ('xp \text{ add})}$ if no add is implemented use: $\frac{1}{('xp \text{ mult})}$ If neither add nor multiply is implemented use the fastest available arithmetic operation as follows: $\frac{1}{3 * 'xp}$ See Notes X & Z
FP only (R_{fp})	$\text{Max } \frac{1}{'fp \text{ add}}, \frac{1}{'fp \text{ mult}}$ See Notes X & Y
Both FP and XP (R)	Calculate both R_{xp}, R_{fp}
For simple logic processors not implementing any of the specified arithmetic operations.	$\frac{1}{3 * 'log}$ Where t_{log} is the execution time of the XOR, or for logic hardware not implementing the XOR, the fastest simple logic operation. See Notes X & Z
For special logic processors not using any of the specified arithmetic or logic operations.	$R = R' * WL/64$ where R' is the number of results per second, WL is the number of bits upon which the logic operation occurs, and 64 is a factor to normalize to a 64 bit operation.

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Note X: For CEs which perform multiple arithmetic operations of a specific type in a single cycle (e.g., two additions per cycle), the execution time t is given by:

$$t = \frac{\text{cycle time}}{\text{the number of arithmetic operations per machine cycle}}$$