## **4 MEMORY MODULES AND CARDS**

The following standards for MODULES and CARDS were developed by Committee JC–42.5. In earlier releases of JESD 21–C, the individual standards were intermixed and appeared in one section, 4, in the order in which they were approved with no regard for the module structure or organization. In Release 7, the section has been reorganized and the individual standards grouped in sub–sections by the data word length. A separate section is included (4.1) for those standards that describe features that are generic in nature and independent of the module organization.

The standards establish pin assignments for a series of multi–chip modules. The package configurations and dimensions are as defined in JEDEC Publication 95. The modules will normally be made using surface mount devices described in section 3 of this standard. The initial standards were for DRAM modules, but the since the publication of Std. 21–B, a standard for a families of SRAM and non–volatile modules have been approved. In addition to the device standards, there is a standard that addresses special nomenclature related to the modules.

Section 4.20 is an appendix that contains a series of standards that do not fit into the pattern established for those standards that are inclused in Sections 4.1 through 4.6. Many of them are complete Module specifications that use the standards contained in these sections and that also use memory devices devined in section 3.11 or in other sections of this Standard and that are also more completely defined in the companion Stndard JESD–79 or other complete device specifications.

The sub-sections are as follows:

- 4.1 Module & Card Features
- 4.2 One Byte Modules
- 4.3 Two Byte Modules and Cards
- 4.4 Four Byte Modules and Cards
- 4.5 Eight Byte Modules
- 4.6 Sixteen Byte Modules
- 4.20 Module Specification Appendix.