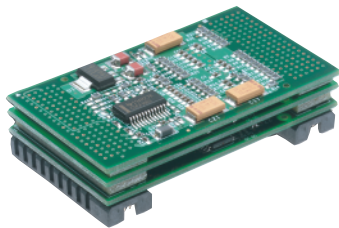




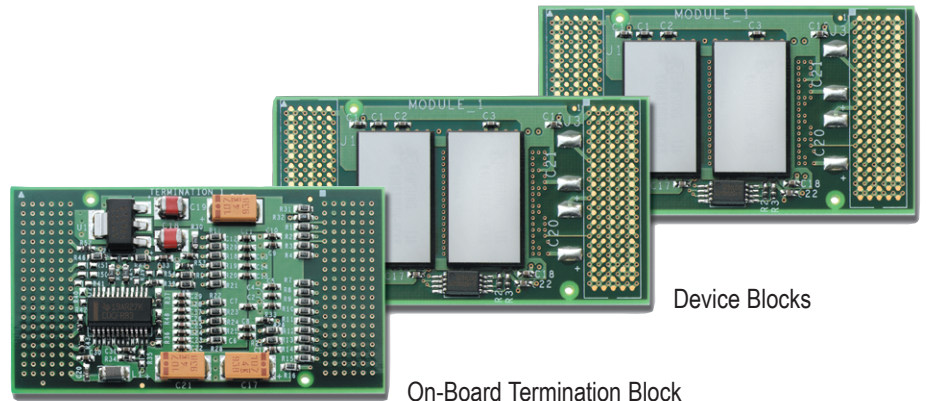
HIGH CONNECTION DENSITY, INC.

www.hcdcorp.com

HCD RDRAM® NexMod™ Technology



NexMod 3-Layer Assembly



On-Board Termination Block
(Modules shown actual size)

FEATURES

All components needed to complete the Rambus® channel:

- * Termination Resistors
- * DRCG
- * VRM

Simplifies board design and shortens time to market

Footprint significantly smaller than competing solutions:

- * Footprint 50% smaller than SO-RIMM and its supporting components

Available from 64MB up to 576MB

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The NexMod™ Product Family

HCD's unique NexMod family of products offers high performance solutions that enable high pin count and robust signal integrity within a compact footprint and a restricted height. NexMod's unique layered structure uses area array connections in a 'building block' architecture. This architecture makes it easier to take advantage of advanced memory technologies such as Direct Rambus® and Double Data Rate (DDR) SDRAM. Expanding the NexMod family to include processors or other integrated circuit components, further enhances customer flexibility.

The RDRAM NexMod™

The RDRAM NexMod offers a complete Rambus channel, including termination resistors as well as the Direct Rambus Clock Generator (DRCG) and Voltage Regulator Module (VRM) onboard - simplifying customer board design and shortening time to market. The onboard channel reduces propagation delay time which results in improved overall system margins. The available memory configurations range from 64MB up to 576MB utilizing 288Mb or 576Mb based RDRAMs. Additionally, the footprint of the module itself is

smaller than competing solutions with significantly lower height, saving valuable space and routing requirements on the mainboard. Advances in high speed signaling architectures continuously challenge current electrical design practices. The HCD RDRAM NexMod memory subsystem enables simplified implementation of the Rambus architecture while addressing space issues faced in many board applications.

The Reliability Factor

The RDRAM NexMod boasts exceptional reliability both within the module and in the connection to the mainboard. Extensive simulations of electrical, mechanical, and thermal conditions have been done, ensuring improved electrical margins within the system. Connections between each of the NexMod 'blocks' are made through ball grid array (BGA) connectors. Flexibility is enhanced by allowing attachment to the mainboard in two ways: with pin grid array (PGA) connectors or soldered directly using BGA technology. This is a distinct advantage over SO-RIMM edge connectors, which are more susceptible to crosstalk, as well as shock and vibration effects.