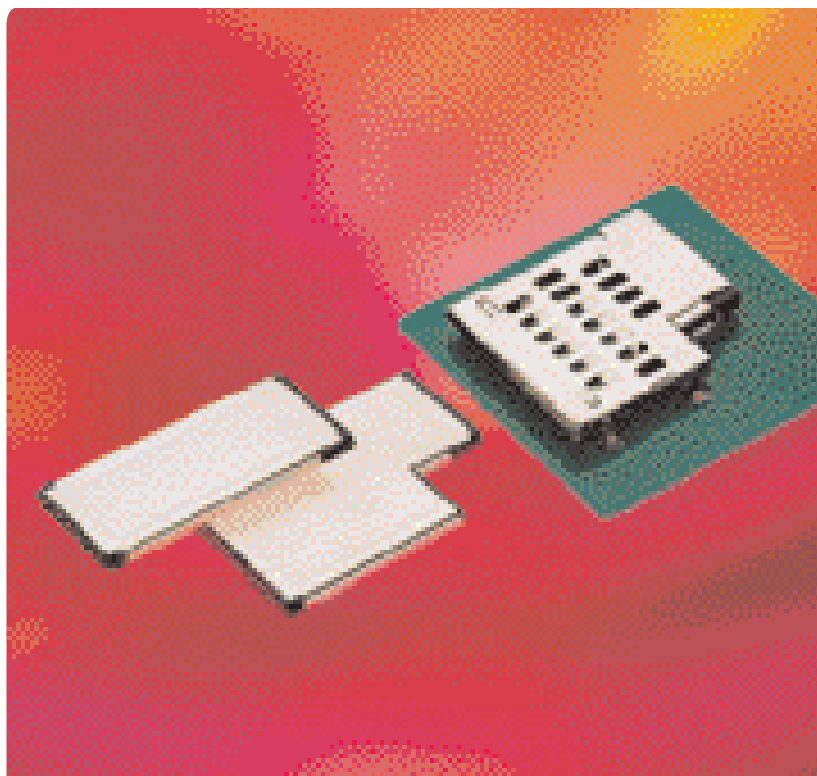


EXPRESSCARD™ HOST CONNECTORS AND SLOT SYSTEMS

DESCRIPTION

ExpressCard™ host connectors and systems from FCI support host systems manufacturers' implementation of ExpressCard technology. The Personal Computer Memory Card International Association (PCMCIA) has developed the ExpressCard Standard as replacement for the PC Card Standard, which defines the popular CardBus and PC Card add-in cards. The new standard will carry forward the benefits of removable communication, storage, I/O, multimedia, security and adapter cards to new generations of mobile and desktop personal computers. The ExpressCard standard supports both USB 2.0 and PCI Express® high-speed serial interfaces. Mobile and desktop host systems can choose to incorporate universal slots, which can accommodate either ExpressCard/34 or ExpressCard/54 module sizes, or ExpressCard/34 slots when space is at a premium. Both are smaller than today's CardBus slot implementations.

FCI offers a number of slot mounting options for its slot systems that enable "card push" ejection. Available options support slot placement either above or below the host PCB. Slot standoff options range between 0.0mm, which provides the lowest vertical profile for "thin" host systems, and 2.2mm, which provides clearance to mount PCB components between the slot and the host PCB. A simplified "grab and pull" slot system is also available for host applications where manual card removal is acceptable.



FEATURES & BENEFITS

- ▀ Electrical performance is validated at the initial PCI Express data rate of 2.5 Gb/s and the anticipated second-generation speed of 5.0 Gb/s
- ▀ Simple beam-on-blade contact interface is rated for 5,000 cycles
- ▀ Single-row, in-line configuration for surface-mount solder tails to facilitate easy soldering and inspection
- ▀ Standoff options range between 0.0mm for "thin" host systems and 2.2mm which provides clearance to mount components between the slot and the host PCB
- ▀ Options available to support slot placement either above or below the host PCB
- ▀ "Card Push" ejection mechanism eliminates need for push rods
- ▀ Available "grab and pull" version supports manual card removal with reduced mechanical complexity
- ▀ RoHS compliant

TARGET MARKETS / APPLICATIONS

- ▀ Data
 - Mobile and Desktop PCs
- ▀ Consumer
 - Set-top boxes
 - Digital TV
 - Home entertainment devices
- ▀ Industrial
 - Industrial PCs
 - Machine control systems
- ▀ Instrumentation
 - Test & measurement devices
 - Medical instrumentation
- ▀ Communications
 - Telecom equipment
 - Datacom equipment



MATERIALS

- Host Connector
 - Housing: High-temperature thermoplastic
 - Terminal: Copper Alloy, Gold over nickel in contact area, tin over nickel in solder area
- Host System
 - Cam Housing: Thermoplastic
 - Metal Shield: Stainless Steel

ELECTRICAL PERFORMANCE

- Contact Resistance: Initial 40 m max.; 55 m max. after test
- Current Rating 0.75 amp per contact
- Meets Insertion Loss, Return Loss and Crosstalk requirements in ExpressCard Standard

ENVIRONMENTAL

Per EIA-364-1000.001 with the test groups derived from the following requirements:

- Durability (mating/unmating) rating of 5,000 cycles
- Field temperature: 65°C
- Field life: 5 years
- Temperature life (preconditioning): 105°C for 72 hours
- Temperature life: 105°C for 120 hours
- Mixed flowing gas duration: 7 days

PART NUMBERS

MECHANICAL PERFORMANCE

- Durability: 5,000 mating cycles
- Insertion Force: 39N max.
- Removal Force: 3.7N min.; 18.5N max.

SPECIFICATIONS

- ExpressCard Connector: GS-12-285
- ExpressCard Host System: GS-12-301

APPROVALS AND CERTIFICATIONS

- ExpressCard Compliance IDs:
 - EC100029 for connector series 10030584
 - EC100035 for connector series 10056265

PACKAGING

- Connector: Tray, T&R, and Tube
- Host system: Tray
- Specifications: GS-14-924, GS-14-925

Slot Width	Module Removal	Mounting Position on Host PCB	Standoff Height from Host PCB	Host Connector	Host Slot System
54mm	Card Push	Above	2.2mm	10056265-122ABTLF	10038774-22ALF
54mm	Card Push	Above	1.8mm	10047129-118ABTLF	10047130-18ALF
54mm	Manual	Above	1.8mm	10047129-118ABTLF	10063760-M18ALF
54mm	Card Push	Above	1.0mm	10055606-110ABTLF	10055607-10ALF
54mm	Card Push	Above	0.0mm	10053826-100ABTLF	10053827-00ALF
54mm	Manual	Above	0.0mm	10030584-1112LF	None
54mm	Card Push	Below	0.0mm	10055262-100BBTLF	10055263-00BLF
34mm	Card Push	Above	0.0mm	10058937-100ABTLF	10065483-00ALF
34mm	Card Push	Below	0.0mm	10065051-100BBTLF	10065052-00BLF

ExpressCard is a trademark of PCMCIA. PCI Express™ is a trademark of PCI-SIG

Use web link www.fciconnect.com/expresscard to obtain product drawings and additional technical information