

CompactPCI Express brings PCI Express technology to the popular PICMG 2.0 CompactPCI form factor, while maintaining compatibility with CompactPCI hardware and software.

The ERmet B8 connectors are designed in accordance with the standard PICMG EXP.0 CompactPCI Express. This completes the family of CompactPCI connectors supplied by ERNI (Signal: ERmet ZD, ERmet B8; Power: ERmet Power Module).

The ERmet B8 enriched hard metric (eHM) connector is used for carrying I/O signals and some power. The connector is keyed and four different key combinations are possible. All combinations support Hot Swap functions. The eHM connector (ERmet B8) with coding for reliable mating is available as a 56 pin male connector (40 signal contacts and 16 additional shield blades) as well as 40 pin female connector.

Features

- Pitch: 2.0 mm
- Number of pins:
 - Male connector: 56 (40 signal and 16 shield)
 - Female connector: 40
- Pressfit termination
- Housing material:
 - Male Connector: PBT
 - Female Connector: LCP
- Performance class 2
- Tray packaging
- According to CompactPCI Express standard

CompactPCI® Express

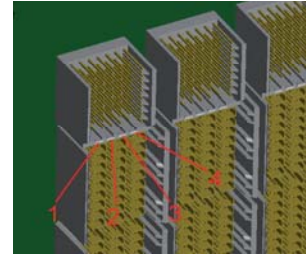
ERmet B8 - CompactPCI Express Connectors

Keying Overview

Male Connectors

Slot Key Configurations Table (Male Connector = XP4)

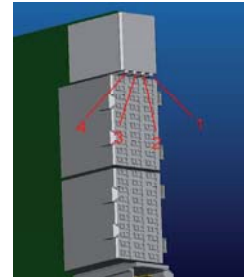
Designator	Slot Type	key pos 1	key pos 2	key pos 3	key pos 4
M1	RIO or no RI/O or no Bussed IO Slot	fill	empty	empty	empty
M2	PXI Slot	fill	empty	fill	empty
M3	Other Bussed I/O Slot	fill	fill	empty	empty
M4	Extended RI/O Sys Slot	empty	empty ⁴	empty ⁴	fill
With extended pins for RIO					
M1	RIO or no RI/O or no Bussed IO Slot	fill	empty	empty	empty
Note: Empty means with key slot, fill means no key slot Example: M2 has slots in positions 2 and 4.					



Female Connectors

Board Key Configurations Table (Female Connector = XJ4)

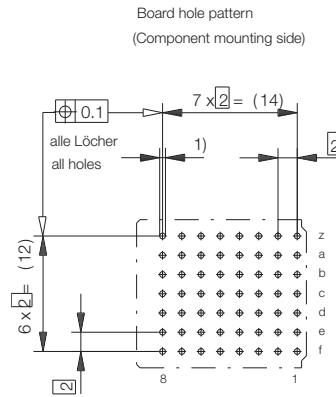
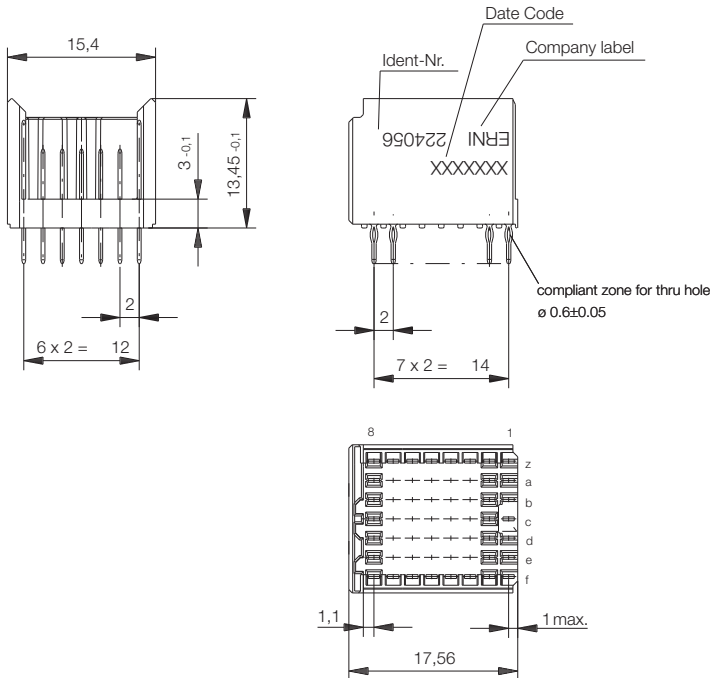
Designator	Board Type	key pos 1	key pos 2	key pos 3	key pos 4
F1	RIO	empty	fill	fill	fill
F2	PXI	empty	fill	empty	fill
F2	PXI (Special connector: PXI board to EXP.0 HybridSlot; pos 3 not populated)	empty	fill	empty	fill
F3	Other Bussed I/O	empty	empty	fill	fill
F4	Extended RI/O Sys Board	fill	empty ⁴	empty ⁴	empty
F5	No RI/O or Bussed I/O	empty	empty	empty	fill
Note: Empty means no key, fill means with a key Example: F2 has raised keys in position 2 and 4.					



ERmet B8 - CompactPCI Express Connectors

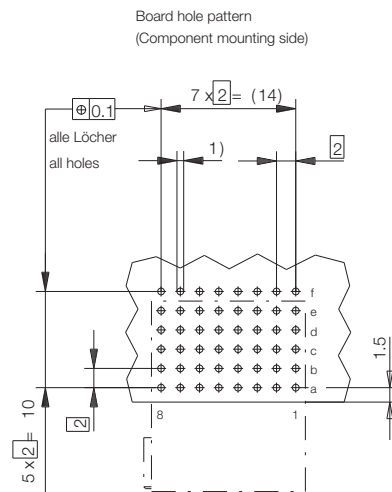
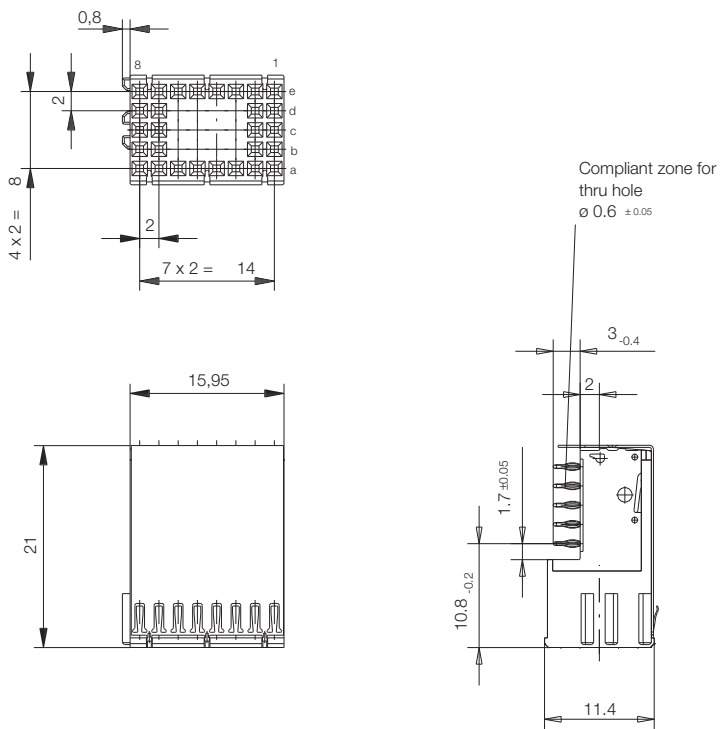
Dimensional Drawings

Male Connectors



- 1) $\varnothing 0,6 \pm 0,05$ Diameter of finished plated-through hole
- $\varnothing 0,7 \pm 0,02$ Diameter of drilled hole

Female Connectors



- 1) $\varnothing 0,6 \pm 0,05$ Diameter of finished plated-through hole
- $\varnothing 0,7 \pm 0,02$ Diameter of drilled hole



ERmet B8 - CompactPCI Express Connectors

Ordering Information

Male Connectors

Configuration	Number of Signal Pins	Termination	Slot Type	Keying Designator	Part Number
Type B8 Non-staged	40	Pressfit	RI/O or no RI/O or no Bussed I/O	M1	224056
Type B8 Non-staged	40	Pressfit	PXI	M2	224057
Type B8 Staged (Hot-swap)	40	Pressfit	RI/O or no RI/O or no Bussed I/O	M1	204976
Type B8 Staged (Hot-swap)	40	Pressfit	PXI	M2	214431
Type B8 Staged (Hot-swap)	40	Pressfit	RI/O or not used	M5	224312

Female Connectors

Configuration	Number of Signal Pins	Termination	Board Type	Keying Designator	Part Number
Type B8	40	Pressfit	RI/O	F1	204975
Type B8	40	Pressfit	PXI	F2	214443
Type B8	40	Pressfit	no RI/O or Bussed I/O	F5	214444
Type B8	40	Pressfit	PXI	F2	224302

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TE Connectivity:](#)

[214431](#) [204976](#) [224056](#) [224302](#) [224056-E](#)