

▶ COM Express Type 6 Carrier Board with Digital Input / Output and Dual Gigabit Ethernet

The COM Express Type 6 Base Carrier Board provides a single solution Digital Input / Output (DIO) and Dual Gigabit Ethernet (GE) platform for a COM Express Computer-on-Module. An embedded Dual Gigabit Ethernet controller, connected to the host module over a PCIe lane, provides Gigabit Ethernet over copper or fibre interfaces.

The 112 Channel DIO interface consists of 48 high current open collector digital outputs and 64 digital inputs. Each of these channels are optically isolated from the system side for 1 500 V RMS. The Carrier Board also provides standard I/O connectors for display, data storage, power, etc.

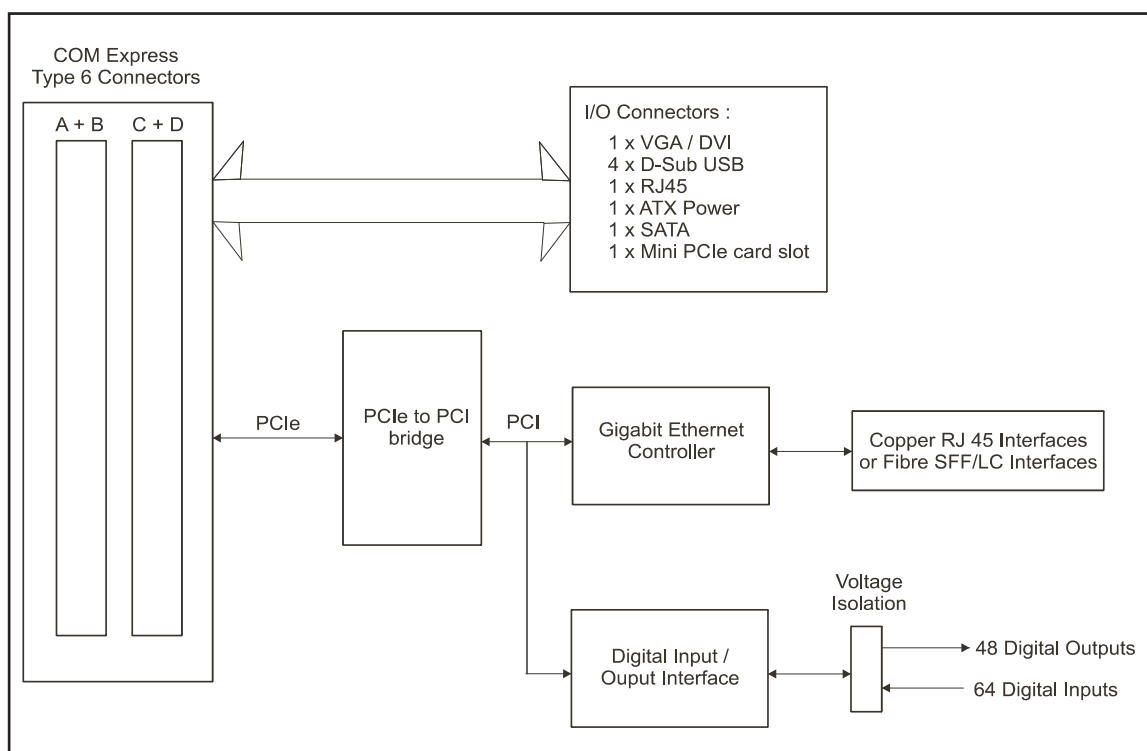


Diagram of COM Express Type 6 Carrier Board with DIO and Dual Gigabit Ethernet

Features

- 112 digital input / output channels
- dual Gigabit Ethernet
- air-cooled version
- commercial, industrial and ruggedised grades
- USB port
- mini PCIe card slot
- Com Express Type 6 interface
- single board solution
- digital I/O channel to system voltage isolation
- small formfactor
- SATA port



► **COM Express Type 6 Carrier Board with Digital Input / Output and Dual Gigabit Ethernet**

Supported Modules	COM Express Pin-out Type 6 Compatible PICMG COM Express Module Base Specification, COM.0 R2.1
Board Functionality	112 Digital Input / Output Channels Dual Gigabit Ethernet over fibre or copper interfaces
USB	4 x USB 2.0 over D-subminiature connectors
Data Storage	1 x SATA connector for expandable memory storage 1 x PCIe Mini Card slot for mountable Solid State Drives
Ethernet connectors	1 x RJ45 connector or 1 x D-subminiature connector 2 x SFF / LC or 2 x RJ45 connectors or 2 x D-subminiature connectors
Display	VGA and DVI ports
Power Connectors	ATX Power Supply 20 + 4 pins
Formfactor	170 mm x 170 mm formfactor

Power	3,3 V DC at 1 A (3,3 Watt), 5 V DC at 2 A (10 Watt) and 12 V DC at 1 A (12 Watt)		
MTBF	Figures according to MIL-HDBK-217F, Parts Stress Method		
	Commercial Grade	Ground Benign, Controlled, 25 C	250 000 hours
	Ruggedised Grade	Ground, Mobile, 45 C Naval, Sheltered, 40 C Airborne, Inhabited Cargo, 55 C	45 000 hours 60 000 hours 40 000 hours
Software Drivers	Support for Linux. VxWorks, Windows and others are costed options.		

Physical Characteristics				
	Cooling Type	Air-Cooled		
Dimensions		170 mm x 170 mm		
Mass		800 g +/- 50 g		
Environmental Specifications				
	Grade	Commercial	Extended Industrial	Ruggedised
Temperature	- Operating	0 C to +55 C	-20 C to +75 C	-40 C to + 85 C
	- Storage	-40 C to +85 C	-40 C to +85 C	-55 C to +125 C
Humidity		0% - 90%	0% - 95%	0% - 95%
Shock		10 g peak for 11 ms	20 g peak for 11 ms	40 g peak for 11 ms
Vibration	- Sine	2 g (peak) at 10 Hz to 100 Hz	5 g (peak) at 5 Hz to 2 kHz	10 g (peak) at 5 Hz to 2 kHz
	- Random	0,04 g²/Hz at 15 Hz to 2 kHz	0,06 g²/Hz at 15 Hz to 2 kHz	0,1 g²/Hz at 15 Hz to 2 kHz



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Part Designation	Grade	Ethernet Connector Type	Ethernet Media Type
CCII/DIO/CEXP/112C/FP/SX/COM CCII/DIO/CEXP/112C/FP/SX/MIND CCII/DIO/CEXP/112C/FP/SX/RGD	Commercial Extended Industrial Ruggedised	SFF/LC Connector SFF/LC Connector SFF/LC Connector	Fibre, Multimode Fibre, Multimode Fibre, Multimode
CCII/DIO/CEXP/112C/FP/LX/COM CCII/DIO/CEXP/112C/FP/LX/MIND CCII/DIO/CEXP/112C/FP/LX/RGD	Commercial Extended Industrial Ruggedised	SFF/LC Connector SFF/LC Connector SFF/LC Connector	Fibre, Singlemode Fibre, Singlemode Fibre, Singlemode
CCII/DIO/CEXP/112C/FP/RJ/COM CCII/DIO/CEXP/112C/FP/RJ/MIND CCII/DIO/CEXP/112C/FP/RJ/RGD	Commercial Extended Industrial Ruggedised	RJ-45 Connector RJ-45 Connector RJ-45 Connector	UTP, Copper UTP, Copper UTP, Copper
CCII/DIO/CEXP/112C/FP/DS/COM CCII/DIO/CEXP/112C/FP/DS/MIND CCII/DIO/CEXP/112C/FP/DS/RGD	Commercial Extended Industrial Ruggedised	D-subminiature D-subminiature D-subminiature	UTP, Copper UTP, Copper UTP, Copper