

COM Express Type 2 Carrier Board



Product Datasheet

COM  Express

PDSi's new **COM Express Type 2 Carrier Board** (COMX-CB) enables rapid startup of your development project with a convenient microATX-sized I/O board that is compatible with PDSi's COMX-S1 and other Type 2 COM Express modules. Just mount your module on the COMX-CB carrier, plug-in appropriate I/O devices, and apply power. The carrier serves as both a development platform and reference design for constructing your ultimate custom I/O subsystem. Take advantage of PDSi's ready-to-go carrier and standard COM Express module to jump start your project and significantly reduce overall design time and effort.



Carrier Board Key Features

- Convenient evaluation platform, compatible with
 - PDSi's COMX-S1 AMD-based module
 - Most other Type 2-compliant modules
- Standard microATX form factor
- Provides all I/O and most connectors needed for full evaluation:
 - RJ45 Ethernet
 - USB
 - SATA
 - Serial & Parallel Ports
 - VGA & LVDS
 - Audio
 - PCIe & PCI
 - Keyboard & Mouse
 - Compact Flash
 - Power

Need a Custom I/O Carrier Board?

No Problem! PDSi can design a COM Express carrier board to fit your application.

- **Alternate form factor**
- **Custom I/O configuration**
- **Specific connectors**
- **Additional functionality**
- **Special enclosure**
- **Unique footprint / dimensions**
- **Turnkey integration**

Development System Packages

For software developers and evaluators who want an even faster out-of-the-box experience, PDSi offers several development system packages incorporating the COMX-S1 module and COMX-CB carrier board into a workstation that includes a 250W power supply, fans, 80GB HDD and 20x DVD drive. Avoid the hassle of hooking up these basic devices and get right down to trying your code on the COM Express platform.



COMX-DV



COMX-MV

EtherNet	1 x 10/100/1000 (Broadcom BCM5787) RJ45 port
USB	8 USB 2.0 ports (4 on backpanel, 4 headers)
PCIe / PCI	1 PCIe x 16 connector 1 PCIe x 4 and 1PCIe x1 connector 1 PCI 2.1 32 bit / 33 MHz
Drives	4 x SATA ports IDE/ATA 133 connector
Compact Flash	Connector for easy boot-up

CRT Video	Analog VGA (up to 2048x1536)
Flat Panel Video	Dual channel LVDS
TV Out	S-Video/Composite Video/ Component Video (YPbPr) - 7 pin mini DIN
Audio	Line In, Line Out, Mic Headers for CD In, SPDIF I/O (AC '97 interface - HD audio not supported)
Serial/Parallel	2 x Serial (1 on backpanel, 1 header) 1 x Parallel
Keyboard/Mouse	PS/2 Keyboard and Mouse connectors

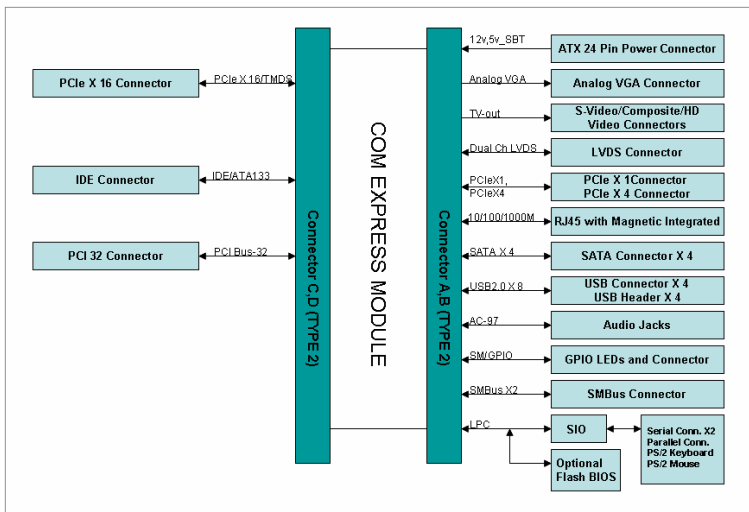
BIOS	Optional Flash BIOS via LPC connector
Other	GPIO LEDs and header Front panel header I2C header Power & Reset buttons

Power Required ATX power supply, 200W

Compliance Accepts PICMG COM Express Type 2 Basic or Extended modules
RoHS Directive 2002/95/EC

FormFactor & Dimensions MicroATX
9.6 in (244 mm) x 9.6 in (244 mm)

Temperature & Humidity Operation : 0 to 50 degC
10% - 90% non-condensing



COMX-CB COM Express Type 2 Carrier Board – Block Diagram



COMX-S1 Module mounted on COMX-CB Carrier Board



Ordering Information:

Ordering Part Number (OPN)	Description	Notes
COMX-CB-100-00-0	COMX-CB COM Express Type 2 Carrier Board	
COMX-SB-110-xx-x	COMX-S1 COM Express Module mounted on Carrier Board	Refer to COMX-S1 module configuration information
COMX-DV-110-xx-x	Low Profile COM Express Development System including COMX-S1 Module and COMX-CB Carrier Board, 250W Power Supply, 80GB HDD and 20x DVD, mounted in enclosure (low profile PCI slots)	Refer to COMX-S1 module configuration information
COMX-MV-110-xx-x	Mid Tower COM Express Development System including COMX-S1 Module and COMX-CB Carrier Board, 250W Power Supply, 80GB HDD and 20x DVD, mounted in enclosure (full height PCI slots)	Refer to COMX-S1 module configuration information