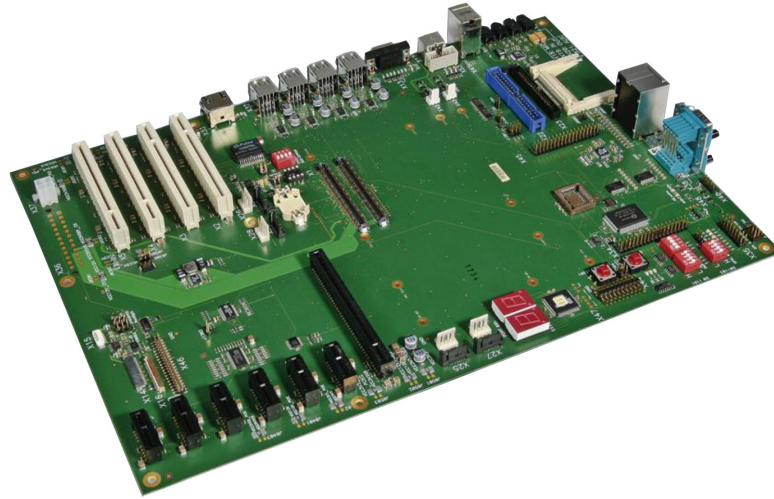


The H4110 COM Express Reference Carrier Board is an ideal platform to develop and prototype the system electronics before it's integrated in the application using a customer specific carrier board. It provides the interface infrastructure for Hectronic's COM Express modules H6309 and H6312 offering PC type connectors for external access. Rapid prototyping to assess the fit of a specific CPU technology is a key instrument to shorten design cycles and to improve time to market of new systems.



## Features

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- Socket for COM Express Type 2 compatible modules
- All formats supported (extended, basic, micro)
- Extended form factor for development environment with additional support logic (e.g. Super I/O)
- Four PCI slots
- Six PCI Express x1 slots
- Four SATA onboard connectors
- IDE (40/44pin) header
- CompactFlash socket
- COM Express specific interfaces on PC style connectors accessible
- Eight USB interfaces
- AC'97 audio codec and high definition audio codec on board
- Post code LED display for easy boot process control
- Three different connectors to connect an LVDS display
- ATX power connector

# H4110 - Technical Specifications

<b>Module Interface</b>		<b>Miscellaneous</b>	
<b>COM Express module connector</b>	Socket for COM Express module type 2 supports all module sizes (micro, basic, extended)	<b>GPIO</b>	3 4 x GPO driving 4 LEDs in parallel, 4 x GPI connected to DIP switches in parallel
<b>Bus Interfaces</b>		<b>Post Code Port</b>	80 display for boot information
<b>PCI Express</b>	Six PCI Express x1 slots	<b>Super I/O</b>	Winbond W83627THF driving 2x RS232, 1 x IrDA, PS/2 Mouse/Keyboard, system monitoring and fan control
<b>PCI</b>	Four PCI slots 32-bit V2.1	<b>LAN Interface</b>	
<b>LPC</b>	LPC bus on 36 pin header	<b>Ethernet</b>	RJ45 connector for LAN on COMe module, 10/100/1000 Mb/s supported, depending on COM Express module used, two status LED's integrated
<b>PCI Express Graphics</b>	One PCI Express x16 Graphics slot alternatively two SDVO channels	<b>Sound Interface</b>	
<b>Drives</b>		<b>Audio</b>	AC'97 codec for MIC, Line-In, Line-Out and headphone on external connector, high definition audio codex supports 8 channels
<b>SATA</b>	4 x SATA (150MB/s)	<b>Power Supply</b>	
<b>IDE</b>	Primary Channel on 44 pin and 40 Pin connector for Ultra ATA-100/66/33	<b>Power</b>	Standard 24 pin ATX power connector and additional ATX12V connector; power requirement depending on COMe Express module used
<b>Compact Flash</b>	Socket for True IDE devices using primary IDE channel	<b>Environment</b>	
<b>Standard Interfaces</b>		<b>Ambient</b>	0°... +55°C operating
<b>USB</b>	8 x USB 2.0 supported	<b>Temperature</b>	-25°... 85°C storage
<b>Serial</b>	2 x COM on 9 pin Dsub connector	<b>Humidity</b>	20 ... 80% operating 5 ... 95% storage (non condensing)
<b>IrDA</b>	1 x IrDA using one COM port	<b>Mechanical</b>	
<b>Keyboard</b>	PS/2 (from Super I/O W83627THF) or USB keyboard	<b>Dimensions</b>	368mm x 255mm, (LxW)
<b>Mouse</b>	PS/2 (from Super I/O W83627THF) or USB mouse		
<b>Flat Panel/CRT Interface</b>			
<b>Graphics</b>	Standard VGA monitor interface (Dsub15pin)		

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