XC6 – ESMini™ COM Carrier Board for 3.5" PCs

- 1 ESMini[™] computer-on-module slot
- 2 Fast Ethernet , 4 USB 2.0, 1 UART
- DVI-I, audio I/O, TTY
- PCI Express[®] Mini Card slot and SIM card holder
- USB Flash disk slot
- microSD[™] card holder
- SATA for external hard disk on board
- -40 to +85°C screened

The XC6 is an ESMini[™] carrier that can be used together with any type of ESMini[™] module. It provides a PCI Express[®] Mini Card slot with SIM card holder for wireless applications. A USB Flash disk slot and a microSD[™] card slot as well as a SATA connector for an external hard disk allow a further extension of the storage capacity. As graphics the XC6 provides a



DVI-I connector. As I/O the XC6 offers 2 Fast Ethernet, 4 USB host ports (one also configurable as a client), audio in and out, a configurable RS232/RS422/RS485 interface on a 9-pin D-Sub connector, a TTY interface for a modem, eight GPIO lines with +5V level and 16 GPIO lines with 3.3V level. The I/O of the XC6 can be extended by connecting an SA-Adapter[™] to the +5V GPIO connector, e.g. for IBIS or CAN bus functionality.

Its dimensions correspond to a 3.5" PC.



Diagram



Legend

Option

Technical Data

ESMini™ Carrier Card	 One ESMini[™] slot J1 and J2 assembled 		
Memory	 One SATA connector One USB Flash disk slot □ Via one USB onboard connector One microSD[™] card slot 		
Graphics	 One DVI-I connector Analog VGA signals via LVDS interface 		
Ι/Ο	 Four USB 2.0 host connectors, one optionally usable as client 10/100Base-T Ethernet Two interfaces on RJ45 connectors Audio Audio in Audio out Via 3.5 mm jack RS232/RS422/RS485 One interface via 9-pin D-Sub connector Configurable via software TTY Max. transfer rate 4800 bit/sec Active or passive Electrically isolated GPIO 8 lines on a 10-pin connector (5 V level, for connection of an SA-Adapter[™]) 16 lines on an 18-pin connector (3.3 V level) 		
One PCI Express® Mini Card slot	 With SIM card slot Via one PCI Express[®] x1 links and one USB port 		
Miscellaneous	 Goldcap Battery holder Power button signal on pin header Reset in/out on pin header 		
Electrical Specifications	 Supply voltage/power consumption: ATX standard power supply via 4-pin connector +5 V, 2.1 A max. +12 V (12 V only for LVDS backlight), (depends on the display) 0.7 A with SHARP LQ121S1LG61 (12.1 " / 800x600) with full brightness Power supply cable should have a cross section of at least 1.5 mm² MTBF: 683,499 h @ 40°C according to IEC/TR 62380 (RDF 2000) 		
Mechanical Specifications	 Dimensions: 146x102 mm Weight: 142 g (without ESMini™ module) 		
Environmental Specifications	 Temperature range (operation): -40+85°C (screened) Airflow depending on ESMini[™] module Temperature range (storage): -40+85°C Relative humidity (operation): max. 95% non-condensing Relative humidity (storage): max. 95% non-condensing Altitude: -300 m to +2,000 m Bump: 10 g/16 ms Conformal coating on request 		
Safety	PCB manufactured with a flammability rating of 94V-0 by UL recognized manufacturers		

Configuration & Options

Standard Configurations

Article No.	Interfaces	
08XC06-01	1x TTY, 1x RS232, 1x DVI-I, 1x Audio I/O 4x USB2.0, 2x Fast Ethernet	
Options		
Graphics	 One LVDS ZIF connector For direct connection of an LVDS display Instead of VGA signals on the DVI-I connector One LVDS backlight 10-pin connector 	
I/O	 One USB client port instead of one of the host ports Connection of SA-Adapter[™] on 10-pin GPIO connector (e.g. with IBIS or CAN bus functionality) 	

Please note that some of these options may only be available for large volumes. Please ask our sales staff for more information.

Ordering Information

Standard XC6 Models	08XC06-01	Carrier board for ESMini [™] : 1x TTY, 1x RS232, 1x DVI-I, 1x Audio I/O, 4x USB2.0, 2x Fast Ethernet, USB Flash slot, PCI Express [®] Mini Card socket, SIM card holder, microSD [™] card socket, 8x GPIOs, -40°C+85°C screened
Related Hardware	15MM01-00	Intel® Atom™ Z510, 1.1 GHz, 512MB RAM, 1 Fast Ethernet, 1 CAN, -40+85°C Tcase screened
	15MM01-01	Intel® Atom™ Z530, 1.6 GHz, 1GB RAM, 2 Fast Ethernet, 2 CAN, -25+85°C Tcase screened
	15MM02-00	Intel [®] Atom™ E680T, 1.6 GHz, 1GB DDR2 DRAM, 2 Gigabit Ethernet, 1 CAN, 4 COM, with J1 and J2, -40+85°C with qualified components, with cover and frame
	15PX01-00	GLONASS & GPS PCI Express [®] MiniCard (full size), 3-axis Gyro sensor, -40+85°C with qualified components
Miscellaneous Accessories	0712-0019	Standard ATX PSU, 350 W, 0+40°C
Documentation	20APPN004	Application Note: How to make a USB stick bootable
	20XC06-ER	XC6 Errata
	20XC06-00	XC6 User Manual

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