COM Express Modules

VIA

COMe-8X80

COM Express Module, Type 2, Basic Form Factor with Nano™, LVDS, USB, IDE, SATA, LAN and PCIe

Board Placement

BIOS Flash ROM

VX800

COM Express type 2 connectors
(bottom side)

VIA Nano™ processor

DDR2 SODIMM socket

Features

■ Low power VIA 64-bit Nano™ processor

■ Supports one SODIMM socket for DDR2 memory (max.2GB)

■ Integrated with VIA Chrome™9 HC3 DX9 3D/2D graphics with VC1, MPEG-2, WMV9 decoding acceleration

■ Supports one 4-lane PCIe, two 1-lane PCIe, and three PCI expansion

■ Display interface in CRT, 18/24-bit dual-channel LVDS panel, and one DVP port

■ Supports one 10/100 Mbps Ethernet on module

■ Supports one IDE and two SATA (3 Gbps)

■ Supports six USB 2.0 ports
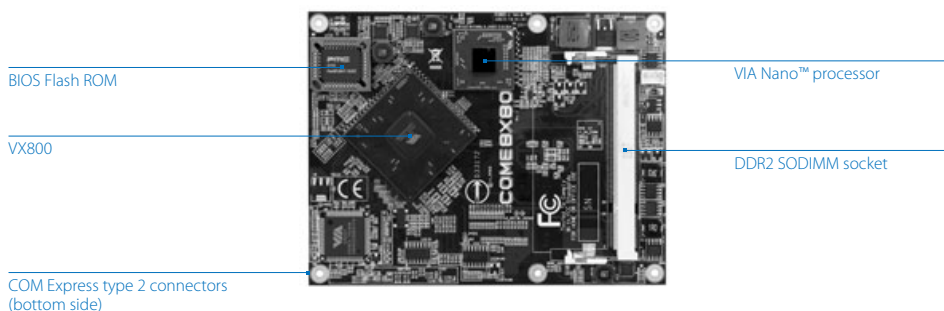
Specifications

Model Name		COMe-8X80-16	COMe-8X80-08E
Core	**Processor**	1.6GHz VIA Nano™	800MHz VIA Nano™
	Chipset	VX800 Unified Digital Media IGP chipset	
	System Memory	1 x DDR2 533/667 SODIMM socket, up to 2GB memory size	
	BIOS	Award BIOS, LPC 4/8Mbit flash memory	
	Operating System	Windows XP, Windows Embedded CE, Windows Embedded Standard, Linux	
	Hardware Monitoring	CPU temperature reading. CPU fan speed control. System Voltage monitoring	
	Watch Dog Timer	Software programmable	
	Expansion Buses	1 x PCIe x4 2 x PCIe x1 3 x PCI	
Video	**Chipset**	Integrated with VIA Chrome™9 HC3 DX9 3D/2D graphics with VC1, MPEG-2, WMV9 decoding acceleration	
	CRT Interface	Analog CRT support up to 1920 x 1440 resolution	
	LVDS Interface	Dual-channel LVDS panel support, both 18/24-bit	
	Expansion Buses	1 x DVP port to external HDMI/LVDS/DVI transmitter and TV encoder	
Ethernet	**Chipset**	VIA VT6107 10/100Mbps controller	
IO	**USB**	Supports up to 6 USB 2.0 ports	
	SATA	Supports up to 2 SATA II ports	
	IDE	Supports up to 1 Ultra-DMA 133/100/66 IDE port	
	PCIe	Supports 1 PCIe x4 & 2 PCIe x1	
	PCI	Supports 3 PCI (32-bit, 33MHz)	
	Digital I/O	Supports 4 GPI & 4 GPO	
Mechanical & Environment	**COM Express Pin-out Type**	Fully compliant to COM Express type 2	
	Dimension	95 mm x 125 mm (3.73" x 4.92")	
	Operating Temperature	0°C~60°C	
	Storage Temperature	-20°C~70°C	
	Operating Humidity	0% ~ 95% (relative humidity; non-condensing)	

* The product is only available for special project. Please contact your regional sales representative for more details.

VIA Embedded

Carrier Board (COMEDBI)
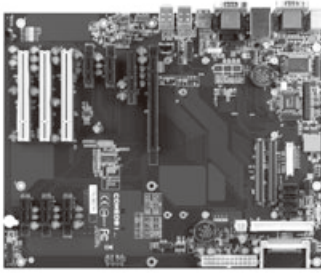
* The carrier board is only for evaluation purpose.

Ordering Information

Model Name	CPU Frequency	Description
COMe-8X80-16	1.6GHz Nano™	COM Express Module with 1.6GHz Nano™ CPU, CRT, LVDS, 6 x USB, 1 x IDE, 2 x SATA, 10/100MLAN
COMe-8X80-08E	800MHz Nano™	COM Express Module with 800MHz Nano™ CPU, CRT, LVDS, 6 x USB, 1 x IDE, 2 x SATA, 10/100MLAN
COMEDBI	N/A	COMe-8X80 Evaluation Carroer Board

Block Diagram

* All product specifications are subject to change without notice. Update: Jun. 21, 2013.

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