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The Emb_DVK40 Kit

The NXC2620 Emb_DVK40 (Embedded DVK4.0) is a compact-sized computer board with a rich set of features. It is a flexible, high performance and inexpensive development kit designed for general embedded applications such as navigation devices, home automation, and data acquisition,..etc.

The Emb_DVK40 hardware comprises a CPU card, a baseboard, a USB1.1 hub card and a TFT LCD display. Each Emb_DVK40 is pre-installed with either Windows CE 6.0 or Linux 2.6 OS for instant evaluation. The full sets of Windows CE 6.0 and Linux 2.6 BSP are provided to customers for application development with no extra charge.





Emb_DVK40 Linux screen shot

CPU Card

NXC2620 CPU Card is a system on module in small form factor, low power consumption and high performance. The onboard NAND flash memory can be installed with either WinCE or Linux OS.

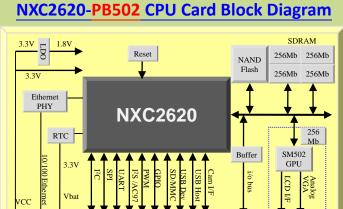
Two types of CPU Cards are available: PB260A card is with a CPU, PB502A card is with a CPU and a GPU for high resolution video display (up to 1280x1024).

TFT-LCD Display

The standard Emb_DVK40 kit comes with a 4.3-inch LCD module at 480x272 resolution. It also supports 4-wire resistance type touch screen to make the evaluation and development tasks easier. Optional LCD sizes such as 5.7-inch (640x480) and 7-inch (800x480) are also available.

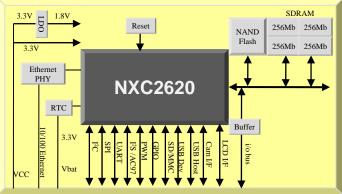
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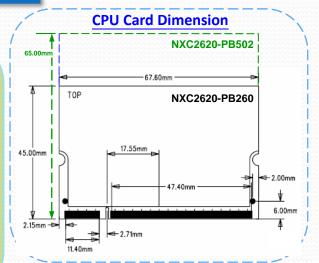












CPU Card		PB260A	PB502A
CPU Speed		300Mhz	
Memor y	NAND	128MB (3.3V, 8-bit)	
	SDRAM	128MB (3.3V, 32-bit)	
Display	LCD I/F	Y (800x480)	Y
	GPU	N	Y (1280x1024)
10/100 Ethernet		Y (1 port, with PHY)	
UART		Y (4 ports)	
USB1.1	Host	Y (1 port)	
	Device	Y (1 port)	
Peripherals		SD/SDHC/MMC, RTC, WDT, I2C, PWM, I2S/AC97, Timer, SPI	
Software (BSP)		Windows CE 6	5.0, Linux 2.6
Dimension (mm)		45 x 67.6	65 x 67.6

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Base Board

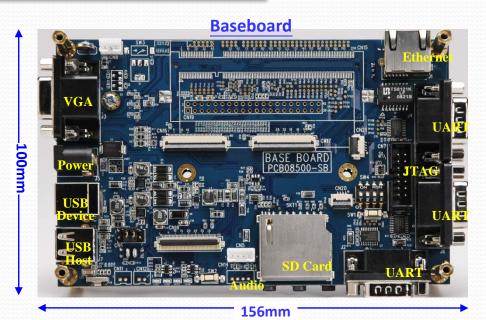
The baseboard is a standard reference environment. It is designed to realize the I/O interfaces from CPU Card.

The I/O and interface features built on the baseboard are :

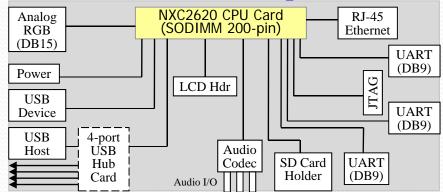
- 1. Base Board Dimension: 100mm x 156mm
- 2. Digital LCD interface
- 3. USB1.1 Host x 4ports (with 4-port Hub)
- 4. USB1.1 Device x 1port
- 5. SD/MMC/SDIO card holder
- 6. Analog VGA I/F (Only for PB502 CPU Card)
- 7. WM9715 Audio Codec and Touch I/F
- 8. 10/100 Ethernet,
- 9. UART x 3

JTAG ICE

The JTAG ICE Box is an easy to use hardware & software debugger for application software or device driver development on Emb_DVK40-based system. (Please note that JTAG ICE is not part of Emb_DVK40, it must be purchased separately)

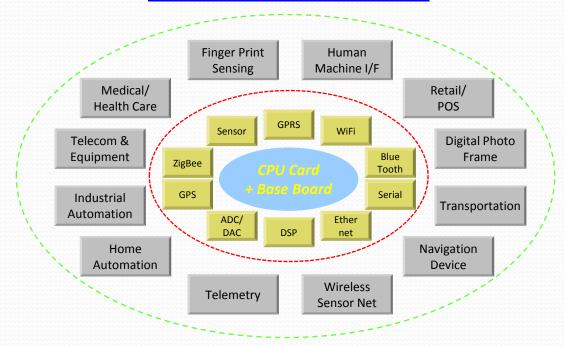


Base Board Block Diagram



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NXC2620 CPU Card Applications



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Ordering Information:

Emb DVK40 ---

Part No.	Descriptions
NX26_Emb_DVK40A	Embedded Development Kit 4.0 A (with NX26-PB260A CPU Card)
NX26_Emb_DVK40B	Embedded Development Kit 4.0 B (with NX26-PB502A CPU Card)

CPU Card --

Part No.	Descriptions
NX26-PB260A	NXC2620 CPU, 128MB SDRAM, 128MB NAND
NX26-PB502A	NXC2620 CPU, 128MB SDRAM, 128MB NAND, w/SM502 GPU

JTAG ICE Debugger --

Part No.	Descriptions
NXC26-ICE	JTAG ICE for NXC2620 Processor

Emb DVK40 Package Content --

- 1 x CPU Card
- 1 x Base Board
- 1 x 4.3-inch LCD module (480x272)
- 1 x USB1.1 HUB Card (4-port)
- 1 x Power Adapter (5V/3A)
- 1 x Battery Pack (3.7V~4.2V)
- 1 x SD Card (1GB or higher)
- 1 x CD (software, manual, schematic)
- 1 x Windows CE License Number