ConnectCore[™] XP

Powerful PXA270 Core Module

High-performance core module with Intel XScale processor provides complete embedded platform support, combining industry-leading performance, multimedia capabilities and low power requirements in an ulta-compact form factor.



Features/Benefits

- Intel PXA270 processor with Intel XScale microarchitecture core
- 64 MB SDRAM and 32 MB Intel StrataFlash®
- Wide variety of I/O connectivity options
- Strong multimedia capabilities w/LCD controller and audio interfaces
- Comprehensive USB 1.1 host/device interface support, plus USB 2.0 OTG
- Memory/expansion card interfaces
- External 32-bit memory bus interface
- Low-power requirements
- Complete embedded software platform offering w/support and design services
 - Microsoft Windows CE and Linux

Overview

The ConnectCore XP module introduces high-performance Intel XScale technology to the ConnectCore family of network-enabled embedded core processor modules. It provides the core processor platform solution of choice for applications demanding the combination of scalable Intel PXA270 performance at speeds up to 520 MHz, on-chip video and audio capabilities, low power requirements, integrated network connectivity, and complete embedded software platform flexibility.

The ConnectCore XP offers a complete system on a module in an ultra-compact form factor with processor, on-board memory, integrated 10/100 Mbit network interface, LCD controller (VGA/SVGA), AC'97 and I'S audio codec interfaces, plus a complete set of peripheral connectivity options such as SSP/NSSP, I'C, UARTs, and IrDA. The external 32-bit address/ data bus interface provides additional flexibility and almost unlimited design freedom.

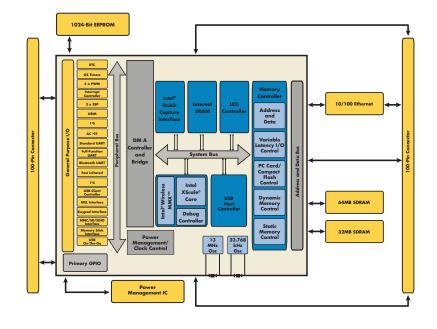
Whether you want to leverage the feature-complete selection of the high-level software components and applications in Microsoft[®] Windows[®] CE, or take advantage of the open Linux[®] environment with its community support and comprehensive software library, Digi offers a solution that meets your requirements while also dramatically shortening traditional time-to-market by minimizing the overall software and hardware designs risks.

Complete LxNETES[™] Linux and Microsoft Windows CE development kits with module, development board, driver source code, documentation, Flash programming tools, cables and accessories are available for evaluation/development use. In addition, we offer professional support and product design services to assist you with your project-specific needs.

Please contact us at 1-877-OEM-DIGI or 952-912-3444 for additional information or to discuss your specific application requirements.



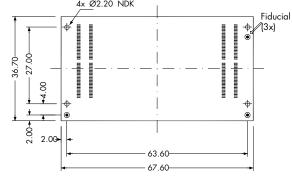
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Features/Specifications

 32-bit Intel XScale PXA270 high-performance RISC processor © 520 MHz 32 MB Intel StrataFlash and 64 MB SDRAM on-board 1024-bit 1-Wire[®] EEPROM Integrated 10/100 Mbps Ethernet MAC/PHY On-chip LCD controller for TFT/STN 	Linux LxNETES 3.x CD ° GNU toolchain (gcc/binutils/uClibc) ° Linux kernel 2.6.x w/patches ° BSP source code ° Boot loader w/source files ° Sample files and documentation	 Standard: IEEE 802.3 Physical layer: 10/100Base-T Data rate: 10/100 Mbps (auto-sensing) Mode: Full or half duplex (auto-sensing) 	
 @ 520 MHz 32 MB Intel StrataFlash and 64 MB SDRAM on-board 1024-bit 1-Wire[®] EEPROM Integrated 10/100 Mbps Ethernet MAC/PHY On-chip LCD controller for TFT/STN 	 GNU toolchain (gcc/binutils/uClibc) Linux kernel 2.6.x w/patches BSP source code Boot loader w/source files 	 Data rate: 10/100 Mbps (auto-sensing) Mode: Full or half duplex (auto-sensing) 	
 32 MB Intel StrataFlash and 64 MB SDRAM on-board 1024-bit 1-Wire[®] EEPROM Integrated 10/100 Mbps Ethernet MAC/PHY On-chip LCD controller for TFT/STN 	' (gcc/binutils/uClibc) ° Linux kernel 2.6.x w/patches ° BSP source code ° Boot loader w/source files	Mode: Full or half duplex (auto-sensing	
SDRAM on-board • 1024-bit 1-Wire [®] EEPROM • Integrated 10/100 Mbps Ethernet MAC/PHY • On-chip LCD controller for TFT/STN	° Linux kernel 2.6.x w/patches ° BSP source code ° Boot loader w/source files	2	
 1024-bit 1-Wire[®] EEPROM Integrated 10/100 Mbps Ethernet MAC/PHY On-chip LCD controller for TFT/STN 	° BSP source code ° Boot loader w/source files	Pa	
 Integrated 10/100 Mbps Ethernet MAC/PHY On-chip LCD controller for TFT/STN 	° Boot loader w/source files	2-	
MAC/PHY • On-chip LCD controller for TFT/STN			
	Sample files and documentation ————————————————————————————————————	ENVIRONMENTAL	
LCD panels	- ConnectCore XP 270 Module	• Storage temperature:	
- Up to SVGA (800x600) resolution	- Development Board	-50° C to +125° C (-58° F to +257° F)	
w/up to 24 bpp color depth • On-board USB 1.1 host/device and	- TFT LCD panel w/touch screen	Operating temperature:	
USB 2.0 OTG interface	 Power Supply and Cords JTAG Booster and adapter 	0° C to 70° C (32° F to 158° F)	
– Full speed (12 Mbps) and low	 Flash programming/verification 	 Relative humidity: 5% to 90% (non-condensing) 	
speed (1.5 Mbps) modes	° I ² C device access	 Altitude: 12,000 feet (3658 meters) 	
• 2 SSP/NSSP ports	° CPU signal tests	Altitude. 12,000 leet (5056 lifeters)	
– Synchronous Serial Protocol (SSP),	– Optional technical support services		
Serial Peripheral Interface (SPI), Microwire, Programmable Serial	Microsoft Windows CE 5.0 BSP CD	POWER	
Protocol (PSP) modes	° BSP source code	REQUIREMENTS	
• 1 full-function UART w/maximum data	° Boot loader w/source files		
rate of 921kbps	° Microsoft QFEs	• 3.3VDC @ 190/350 mA (min/max)	
– TX, RX, RTS, CTS, DTR, DSR, DCD, RI	° Sample files and documentation		
• 1 Bluetooth UART w/maximum data	– ConnectCore XP 270 Module		
rate of 921kbps – TX, RX, RTS, CTS	– Development Board		
Fast Infrared Communications Port (FICP)	 – TFT LCD panel w/touch screen 	DIMENCIONS	
– Up to 4 Mbps half-duplex operation	– Power Supply and Cords	DIMENSIONS	
• 1 I ² C bus interface w/fast mode (400	– JTAG Booster and adapter	• Length: 2.661 in (6.760 cm)	
KHz) support	° Flash programming/verification	• Width: 1.444 in (3.670 cm)	
 I²S interface and AC'97 	° I ² C device access	• Height: 0.192 in (0.490 cm)	
audio controller	° CPU signal tests		
2 Pulse Width Modulator	 One year of technical support 		
(PWM) signals Memory and expansion card interfaces	Requires Microsoft Platform Builder 5.00		
 PCMCIA/CompactFlash[®], SD/SDIO, MMC, and Memory Stick 	(not included).		
• 32-bit external memory bus interface		4x Ø2.20 NDK	
Up to 75 GPIO port options	+	Fic	
On-board JTAG interface			
	36.70 		

25	M 0 D E L	.PART NUMBE	R S
Model		North America	International
LxNETES 3.2	2 Development Kit	FS-9077	FS-9077
	'indows CE 5.0 Development Kit ar of Technical Support	FS-9078	FS-9078
ConnectCore XP 270 (520 MHz, 32/64)		FS-377	FS-377



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