KAMIO-2701

RoHS Compliance XScale PXA270 Embedded SBC Board

LCD Inverter I/F   5V / 12V DC input

128MB SDRAM

520 MHz PXA270 processor

LVDS LCD I/F

Battery-backup RTC

Reset button

RS-232/422/485   RS-232   USB Host x 2   LAN2   LAN1   Mic-in

4-wired touch

2MB Boot ROM

Built-in Windows CE 5.0 boot from Compact Flash memory card

Line-out
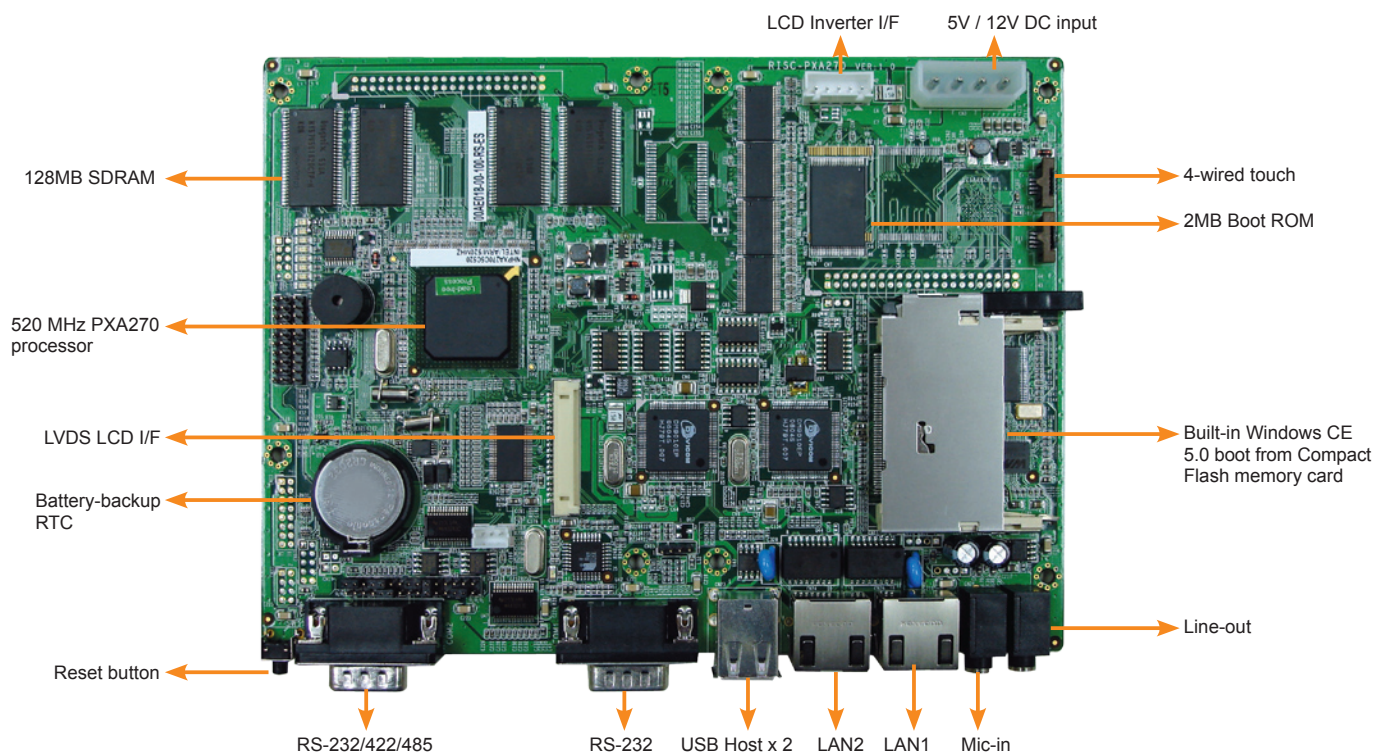
Feature

1. Highly durability in harsh environments, due to rugged, compact, wide-temperature and low power consumption embedded hardware design without failure-prone hard disk and fan.
2. Built-in LVDS TFT LCD interface and touch controller.
3. Fancy PC-style peripherals including Ethernet ports, serial ports, USB ports, Compact Flash memory, and audio.
4. Powered by popular open Windows CE .NET embedded hard real-time operating system with rich Windows-based functions and services.
5. Software development Kit for user application software development.
6. IEI Remote Management Tools make it easy to manage and upgrade your devices.

Specification

◆ **System**
Intel XScale PXA270 520MHz processor
2 MB boot flash
128 MB SDRAM
128 MB Compact Flash
(38 MB reserved for Windows CE 5.0 and 90 MB for user data and programs)
Battery-backup RTC
Watch Dog Timer
Reset button
JTAG pin-header

◆ **Display :**
DF14-20F 18-bit single channel LVDS interface
Resolution : up to 800 x 600, 16 bit color graphics
4-wired resistive touch interface

◆ **I/O and Communication :**
Ethernet : 10/100 Mbps x 2
Serial port : RS-232 x 1, RS-485 x 1
USB Host (Rev. 1.1) x 2
Audio : Mic-in x 1, Line-out x 1

◆ **Power Requirement :**
Power Supply Input : Molex 15-24-4547 5.08 mm (0.20") (equivalent)
                                        Disk Driver Power Connector
Power Consumption : +5V @ 2.0A

◆ **Environmental :**
Operation Temperature : 0 – 65℃
Humidity : 5%RH to 90%RH (non-condensing)

Custom Services

 As a full service engineering and manufacturing company, we IEI know it very well that an embedded system is more than a single board computer (SBC), an embedded system comprises hardware, I/O, embedded Real-Time Operating System (RTOS), application software, and mechanical housing. In addition to consulting, design, and production, we   also offer special optional OEM/ODM services corresponding to each layer of customer product architecture to help our customers to integrate their embedded system seamlessly, efficiently, and to meet their time-to-market requirement.
 We recommend you to have an IEI IPXA270-DK01 development kits for evaluating our solutions at first.

## Dimensions

(unit: mm)
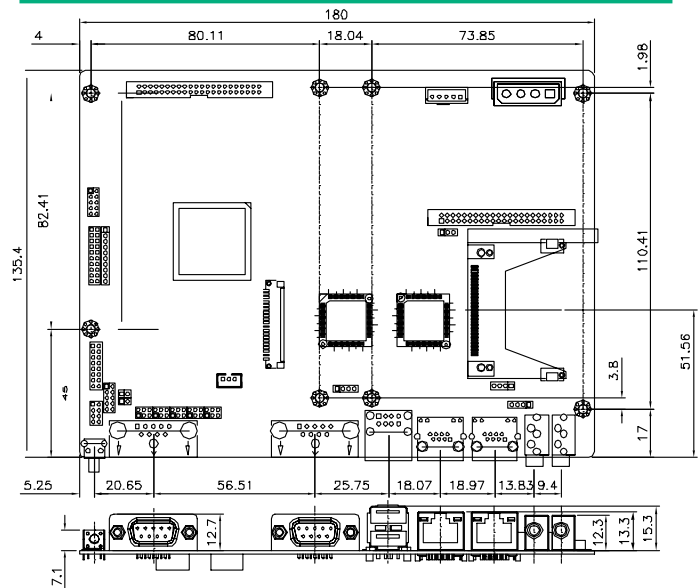
IPXA270-DK01 : The Intel XScale PXA270 platform Windows CE 5.0 development kit

IEI offers ready-to-run rapid application development kits feature all hardware needed for immediate start-up, subsequent development, and evaluation for OEM/ODM services. Both Windows CE .NET 5.0 BSP and SDK are provided for customers to develop Windows CE 5.0 application software and to customize their own Windows CE 5.0 OS image.

Contents of Development Kits :

● One KAMIO-2701 CPU board

● One 128Mbytes Compact Flash memory card with built-in software

● 10.4" VGA LCD TFT backlit display with Max. resolution : 800 x 600 x 16-bit color

● 4-wired resistive touch screen

● 100V-240V AC input power supply with power cables

● Metal brackets and a plastic box to enclosure all these hardware

● One pre-loaded Windows CE 5.0 run-time license

● Software Development Kits (SDK) that supports application development in Microsoft Embedded Visual C++ or Microsoft Visual Studio

● A Windows CE 5.0 Board Support Package (BSP) for customers to customize OS image

● Hardware and software documentation
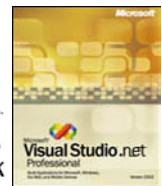
Ordering Information

Part No.	Description
KAMIO-2701-R10	Intel XScale PXA270 RISC-based Embedded SBC with 128Mbyte Compact Flash memory card and built-in Windows CE .NET 5.0 OS.
IPXA270-DK01-R10	Intel XScale PXA270 Windows CE 5.0 OS/Application development kits
ICF-100I/W-[cap]	Industrial / Wide Temp. Compact Flash, RoHS I: Industrial W: Wide Temperature [cap]: 128MB, 256MB, 512MB, 1GB

Packaging List

KAMIO-2701	1 x KAMIO-2701 SBC board 1 x 128MB Compact Flash memory card with built-in Windows CE 5.0 OS and run-time license 1 x Hardware User Manual 1 x Utility CD including utilities, SDK, and user manuals
IPXA270-DK01	1 x IPXA270-DK01 Development Kits 1 x 128MB Compact Flash memory card with built-in Windows CE 5.0 OS and run-time license 1 x Developer Technical Manual 1 x Utility CD including utilities, SDK, BSP, and user manuals