LPC2478 Developer's Kit

Overview

Specifications

Processor
NXP's ARM7TDMI LPC2478 microcontroller in BGA package

Program Flash
128 MB NAND FLASH, 4 MB NOR FLASH + 512 kB internal

Data Memory
32 MB SDRAM + 96 KB internal

Ethernet
100/10M Ethernet interface based on National DP83848 Ethernet PHY

Clock Crystals
- 12.000 MHz crystal for CPU
- 32.768 kHz crystal for RTC

Dimensions
66 x 48 mm

Power
+3.3V powering

Connectors
200 pos expansion connector (as defined in SODIMM standard), 0.6mm pitch

Other
256 Kbit 12C E2PROM for storing non-volatile parameters
Buffered 32- or 16-bit databus

QVGA Base Board

Display
3.2 inch QVGA TFT color LCD with touch screen panel

Connectors
- 200 pos SODIMM connector for OEM Board
- Expansion connector with all LCD controller signals, for custom displays
- Expansion connector with all cpu signals
- Ethernet connector (RJ45)
- MMC/SD interface & connector
- CAN interface & connector
- JTAG connector
- Pads for ETM connector

Interfaces
- USB OTG interface & connector
- USB host interface & connector
- Full modem RS232 on UART #1 (cannot be used on 32-bit databus cpu boards, but RxD2/TxD2 can alternatively be connected to the RS232 interface)
• Dual CAN interface & connector
• IrDA tranceiver interface

Power
• Power supply, either via USB or external 9-15V DC
• 0.3F capacitor backup for RTC and LED on ALARM output

Expansion
• Expansion connector with all LCD controller signals, for custom displays
• Expansion connector with all cpu signals

Other
• 5-key joystick
• 3 axis accelerometer
• Push-button key and LED on P2.10
• 4 push-button keys via I2C
• 8 LEDs (via I2C)
• 1 Analog inputs
• USB-to-serial bridge on UART #0, and ISP functionality
• Reset push-button and LED
• Speaker output (DAC)
• 240x150 mm in size