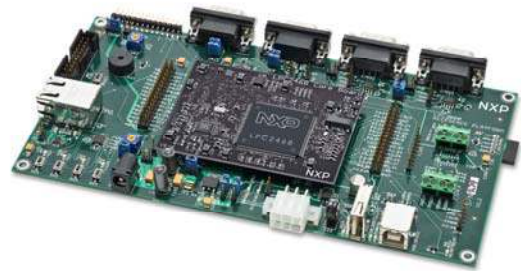
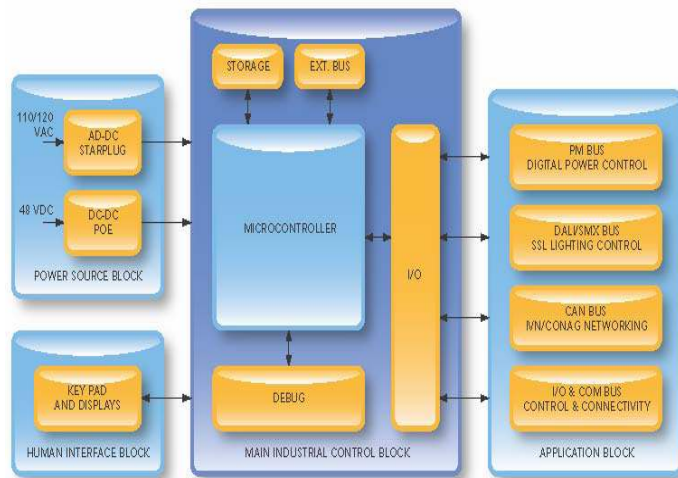


# IRD-LPC2468-DEV



## Highlights

- **LPC2468 72MHz ARM7TDMI-S microcontroller**
- **10/100 Ethernet port**
- **USB Host and Device ports**
- **Two CAN ports**
- **Serial interfaces (I2C, UART, SPI, I2S)**
- **Two RS-232 ports**
- **Parallel interface for displays (LCD standard, VFD optional)**
- **I2C interface for keypad (membrane standard, cap touch optional in the future)**
- **Flexible Power Supply can be 110/220V AC, 48V DC or 5V USB**
- **Utilizes Micrium  $\mu$ C/OS-II Real Time Operating System (RTOS)**
- **Includes IAR Embedded Workbench for ARM (EWARM 5.11) IDE software (60-day free trial version) and a JLINK JTAG debugger**
- **Supplied with easy-to-use application documents for all hardware and software**
- **Platform is based on a modular design for maximum flexibility**
- **Additional base, core, and application boards under development**

The NXP LPC2468 ARM7 microcontroller based industrial reference design (IRD) is optimized to save development time in typical industrial control applications. Its modular format uses a base, core and application boards for added flexibility and a range of configurations. The kit is preconfigured with the IAR EWARM development environment, Micrium  $\mu$ C/OSII operating system, and protocol stacks for Ethernet, USB Host/Device, CAN, and I2C. Using NXP's cost effective ARM7 microcontrollers as the basis for each platform means that designers can create competitive, highly differentiated products at a lower overall cost. The application board plugs directly into the base board via a common application connector and software configures the system for plug-and-play operation.

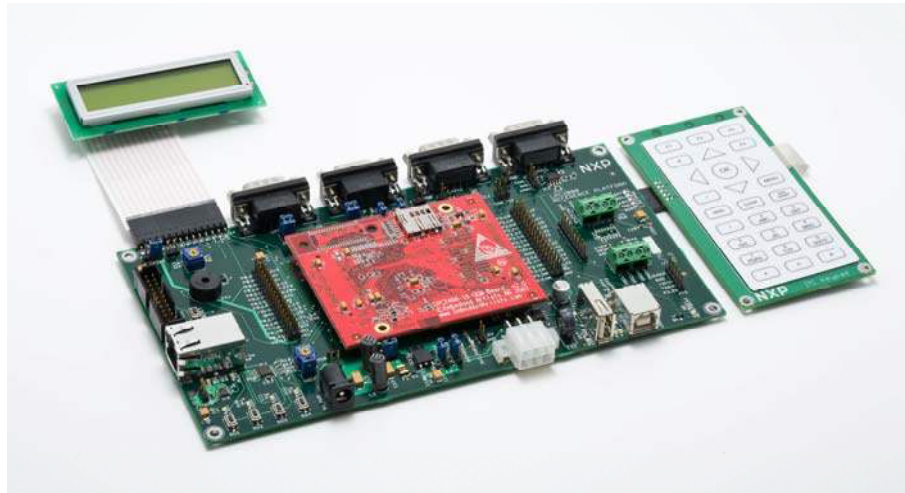
# Features

## LPC2468 Core Board Description

The core industrial control board includes an NXP ARM7 LPC2468 microcontroller running the Micrium  $\mu$ C OS2 RTOS. The LPC2468 has 512kB of on-chip high speed Flash memory, a 10/100 Ethernet Media Access Controller (MAC), a USB full speed device/host/OTG controller with 4kB of endpoint RAM, four UARTs, two CAN channels and a collection of serial communications interfaces.

## Software Included

The IRD software is built around Micrium  $\mu$ C/OS-II™ Real Time Operating System (RTOS), and software modules for Ethernet, USB Host/Device, CAN, File System, and serial communication. IAR's Embedded Workbench® for ARM® C/C++ compiler and debugger are used for the software development. The IRD development kit includes a JLINK JTAG debugger and time limited trial version of the IAR development suite. Several Micrium modules are also provided in source code form, while others can be requested from the Micrium website.



## Ordering Information

**Part Number: IRD-LPC2468-DEV**

**Order Online at:**  
[www.digikey.com](http://www.digikey.com)

**NXP: OM11070**  
**12 NC #: 935287712598**

**Warranty: 30-day money back guarantee**  
**Availability: Stock**

**(256) 883-1240 Phone**  
**(256) 883-1241 FAX**

**Kit Contents:**

**Industrial Reference Design Hardware:**

- LPC2468 Core Board
- IRD Base Board
- 20-character x4 line alphanumeric LCD
- 27 key smart phone style keypad Board
- 5VDC, 2.5A International Plug Power Supply
- USB, Ethernet & RS232 Cables
- External Temperature Sensor Cable

**IRD Software Included:**

- IRD Source Code and Documentation CD
- IAR EWARM Evaluation CD
- IAR J-Link JTAG Debugger
- Micrium  $\mu$ C/OS-II
- IRD Quick Start Guide

All brand names and product names are trademarks or registered trademarks of their respective holder

**FDI** *Future Designs, Inc.*  
Your Development Partner