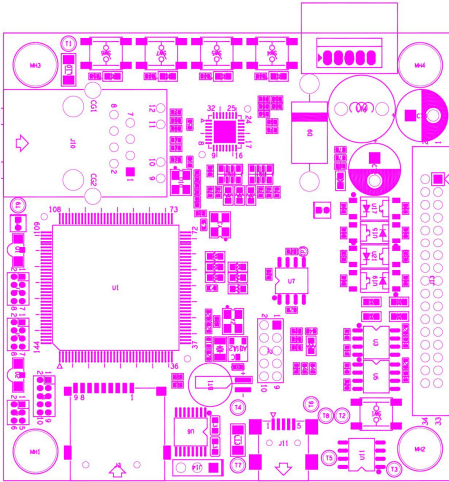# pLink board -- DDC



## Overview

pLink-boards are designed to build sophisticated network connectivity to your product quickly and simply. pLink-board is a compact, integrated solution to web-enable devices with serial capability. pLink-board eliminates the development effort and helps to offer network connectivity within weeks. Your products can be accessed and controller over ethernet.

## Target Applications

* Building Automation Controllers
* Conneted Digital Signage Controller
* Directly Digital Controllers
* Serial Bus Data Converter
* Vehicle electronic applications

## Features and Specifications

### Serial Interface

1. RS-485 x 4 (switched)
2. RS-232 x 2
3. UART x 2 (opt.)
4. CAN x 1 (opt.)
5. USB OTG x 1 (opt.)

* Data Rates: 300bps to 460800bps
* Characters: 7 or 8 data bits (9 or 10 data bit extendable)
* Stop bits: 1 or 2
* Parity: odd,even, none, space, mark
* Control Signals: RTS/CTS(for UART only)
* Flow Control: RTS/CTS(for UART only), Xon/Xoff

### Ethernet Interface

* Interface: Ethernet 10Base-T or 100Base-T, auto MDI/MDIX
* Connector: RJ45 (with magnetics)
* Protocols: TC, UDP, IP, ARP, ICMP, SNMP, TFTP, Telnet, DHCP, HTTP, AutoIP and Bootp
* LEDs: 10BASE-T & 100BASE-TX Link Activity, Fault/In-Use

### Network Management & Security

* User Password protection, SNMP, Telnet, Serial command, internal Web application and Microsoft Windows based utility for configuration

### System Information

* CPU: ARM Cortex M4 Core based 32bits processor, @ 100Mhz
* RAM: 128KBytes
* Flash: 512Kbytes
* OS: MQX Realtime OS with communication stack support
* Firmware: upgradeable via TFTP, UART and USB(opt.)
* Web-enabled Configurator

### Peripherals

1. micro SD slot x 1 support SDHC
2. programmable 4 LEDs, 4 Buttons, 4 Analog inputs and 4 GPIOs
3. isolated DI & DO

### Environmental

* Standard Temp.: 0 to 70℃ (32 to 158℉)
* Extended Temp.: -40 to 85℃ (-40 to 185℉)
* Operating Humidity: 5 to 95% RH
* Storage Temp.: -40 to 85℃ (-40 to 185℉)
* ESD : RS485--- 15KV, RJ-45—1.5KV

### Power

Input Voltage: 7.5~30VDC

### Package

Dimensions: (70) x (70) x (25) mm

## About Portalinks

Portalinks Technology Corp. located in New Taipei City, Taiwan, designs and develops embedded system solutions, for wide-ranged kinds of applications e.g. PDA, Tablet, In-home Display, Multimedia devices, eReader, Medical devices, automation controllers and other common bus infrastructures. From the beginning in 2003, customized solutions offering longevity are a strong part of Portalinks business as well. Successfully deployed products span from embedded modules up to fully integrated systems and products.

pLink board series is a new member to expand our product portfolio. This flexible and modular can be used for both, evaluation purposes of processor technology and directly integrating in customers' system of production.

The pLink™ board utilizes Freescale 32-Bit Kinetis-K microcontroller which is based on the famous ARM Cortex M4 architecture. With their low power consumption and compact dimensions, pLink boards are powerful integrated field controllers suitable for applications in Automotive, Industrial Automation, Medical, Railways & Transportation, Construction and or Defense market segments. Through various onboard I/Os and expansion IO modules, they provide versatile options to satisfy a wide range of application requirements.

Operating Systems such as Freescale MQX, Micrium µC/OS, and FreeRTOS are supported. Operating system integration and adaptations of communication infrastructures like Modbus, CAN, Ethernet etc. and UI development are an integral part of our business as well.