ICP DAS

LP-2841M
Linux Based Metal PAC
with Cortex-A53 CPU and 2 LAN Ports

Features

- Cortex-A53 (1.6 GHz, quad-core) CPU
- Linux kernel 5.4.70 Inside
- 2GB RAM and 8 GB eMMC
- 64-bit Hardware Serial Number
- Hard Real-Time Capability (RTC)
- I/O Expansion Bus
- 2 10/100/1000M Ethernet Ports
- 4 Serial Ports (RS-232/485)
- Operating Temperature: -25 ~ +75 ° C

CE FC RoHS

Introduction

The LP-2841M is equipped with a Cortex-A53 (1.6 GHz, quad-core) CPU running a Linux operating system (Linux Kernel 5.4.70), a variant of input/output ports (VGA, USB, Ethernet, RS-232/485), and powerful software including development tools.

Linux Kernel 5.4.70 is a compact and real-time OS used to quickly create time critical and high performance applications.

Main advantage of the LP-2841M is its high quality control system, including its stability, small core size, optional I/O expansion board, support for Web services (Web/SFTP/SSH server).
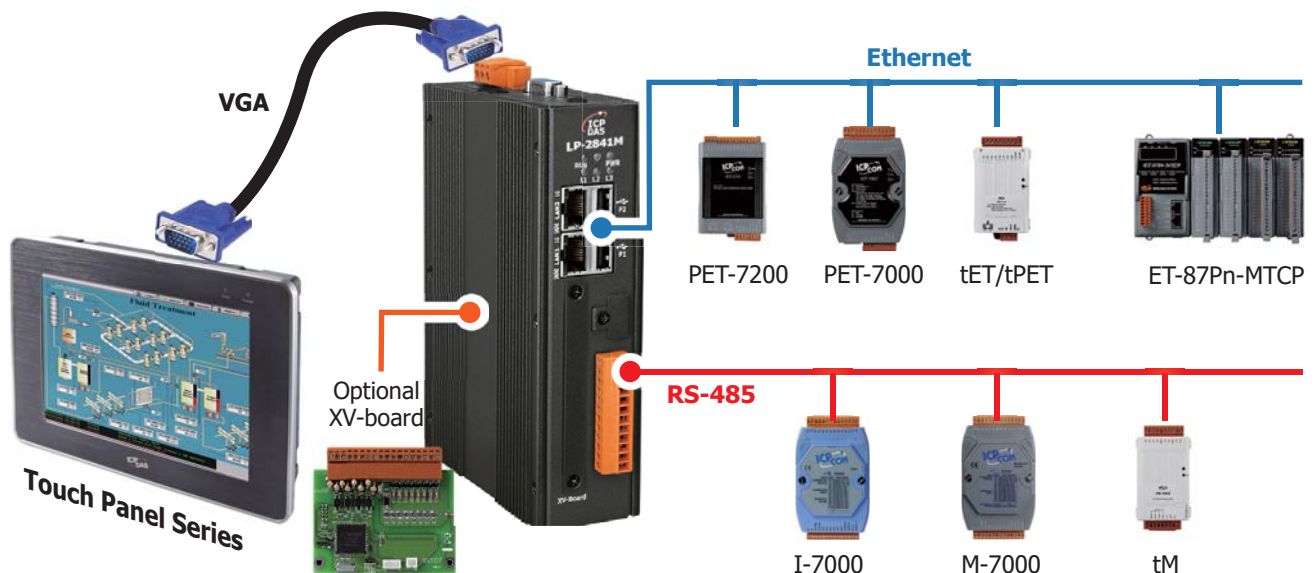
Linux Kernel OS

Main advantage of the LP-2841M is its high quality control system, including its stably properties, open source and the standard LinPAC SDK for Windows and Linux using the GNU C language, GUI software. The main purpose of LP-2841M is to allow the numerous enthusiastic Linux users to control their own embedded system easily within the Linux environment.

- LinPAC SDK for Windows and Linux
- Support for GNU C Language
- Support for GUI: Using GTK + Library
- Support for USB to Serial Converter
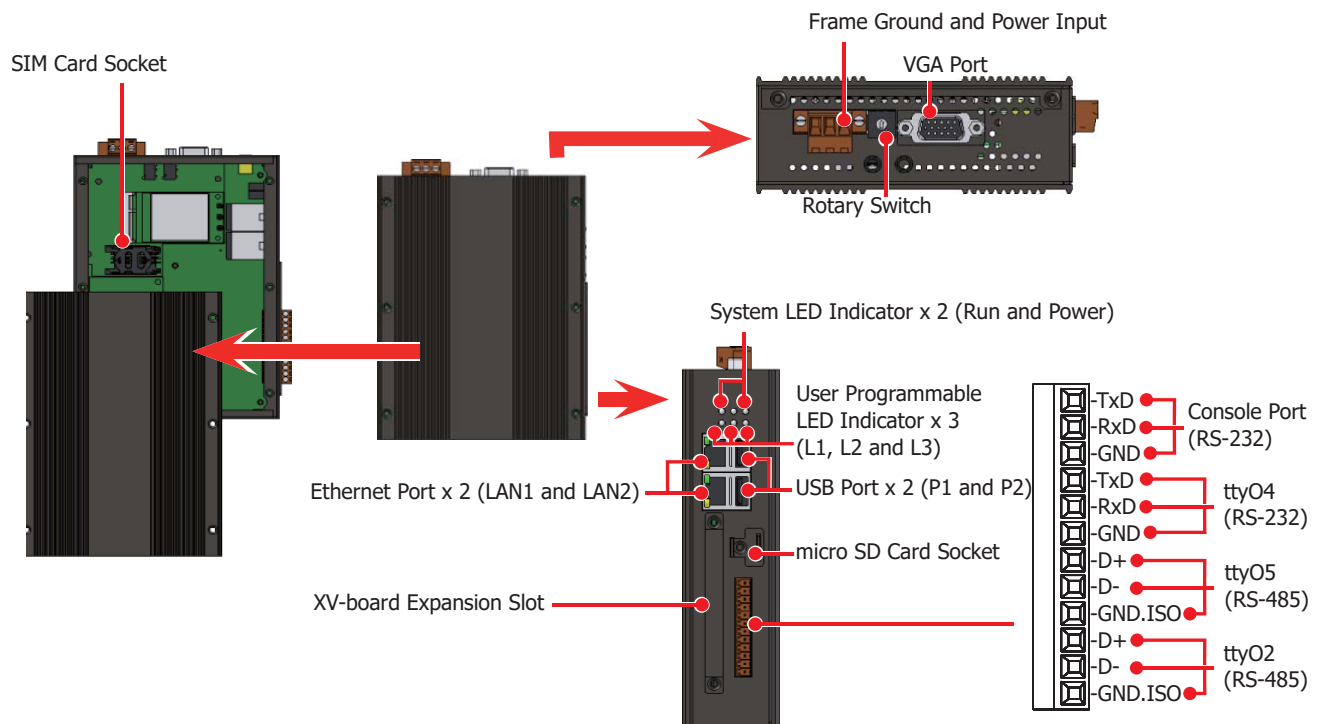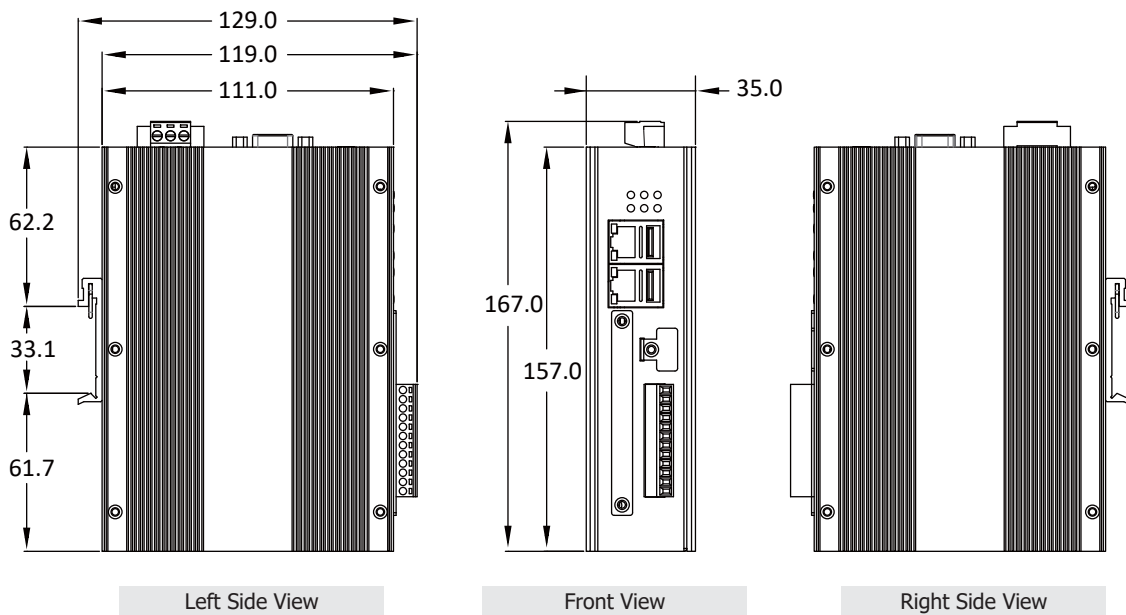- Support for DCON, Modbus and SNMP Protocols

Appications

VGA

Ethernet

PET-7200   PET-7000   tET/tPET   ET-87Pn-MTCP

RS-485

I-7000   M-7000   tM

Touch Panel Series

Optional XV-board

■ Specifications

System Software	
OS	Linux Kernel 5.4.70
Service	SFTP server, Web server, SSH
SDK	LinPAC SDK (GCC based toolchain and LinPAC Libraries)

Main Unit	
CPU	4x Cortex-A53 core platforms up to 1.6 GHz per core
System Memory	2 GB DDR3 SDRAM
Flash	8 GB eMMC
FRAM	64 KB
Storage	4 GB microSD card (up to 32 GB)
RTC (Real Time Clock)	Provide seconds, minutes, hours, dates, day of week, month, year
64-bit Hardware Serial Number	Yes, for software copy protection
Watchdog Timer	Dual Watchdog Timer
Rotary Switch	1 x 10 Position (0 ~ 9)
LED Indicator	1 x Power, 1 x Run, 3 x Programmable
Buzzer	Yes

Display	
VGA	Analog RGB, Resolution: Up to 1280 x 1024

I/O Expansion	
I/O Type	One optional XV-board

Communication Ports	
Ethernet	2 x RJ-45, 10/100/1000M Base-TX (Auto-negotiating, Auto MDI/MDI-X, LED Indicators)
USB	2 x USB 2.0 (host)
Console Port	RS-232 (RxD, TxD and GND); Non-isolated
ttyO2	RS-485 (Data+, Data-); 2500 VDC isolated
ttyO4	RS-232 (RxD, TxD and GND); Non-isolated
ttyO5	RS-485 (Data+, Data-); 2500 VDC isolated

Mechanical	
Casing	Metal
Dimensions (W x L x H)	35 mm x 167 mm x 119 mm
Ingress Protection Rating	IP30 (Aluminum)
Installation	DIN-Rail, Wall mounting

Environmental	
Operating Temperature	-25 ~ +75 °C
Storage Temperature	-40 ~ +80 °C
Humidity	10 ~ 95 % RH (Non-condensing)

Power	
Input Range	+12 ~ 48 VDC
Consumption	4.8 W (0.2 A @ 24 VDC)

📁 Appearances

SIM Card Socket

Frame Ground and Power Input

VGA Port

Rotary Switch

System LED Indicator x 2 (Run and Power)

User Programmable
LED Indicator x 3
(L1, L2 and L3)

Ethernet Port x 2 (LAN1 and LAN2)

USB Port x 2 (P1 and P2)

micro SD Card Socket

XV-board Expansion Slot

-TxD
-RxD
-GND
Console Port
(RS-232)

-TxD
-RxD
-GND
ttyO4
(RS-232)

-D+
-D-
-GND.ISO
ttyO5
(RS-485)

-D+
-D-
-GND.ISO
ttyO2
(RS-485)

📁 Dimensions (Units: mm)

129.0
119.0
111.0

62.2

33.1

61.7

Left Side View

35.0

167.0

157.0

Front View

Right Side View

📁 Ordering Information

LP-2841M CR	Linux Based Metal PAC with Quad-Core Cortex-A53 CPU and 2 LAN Ports (RoHS)

📁 Accessories

XV-Board	Add-on I/O Expansion Board