



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



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).

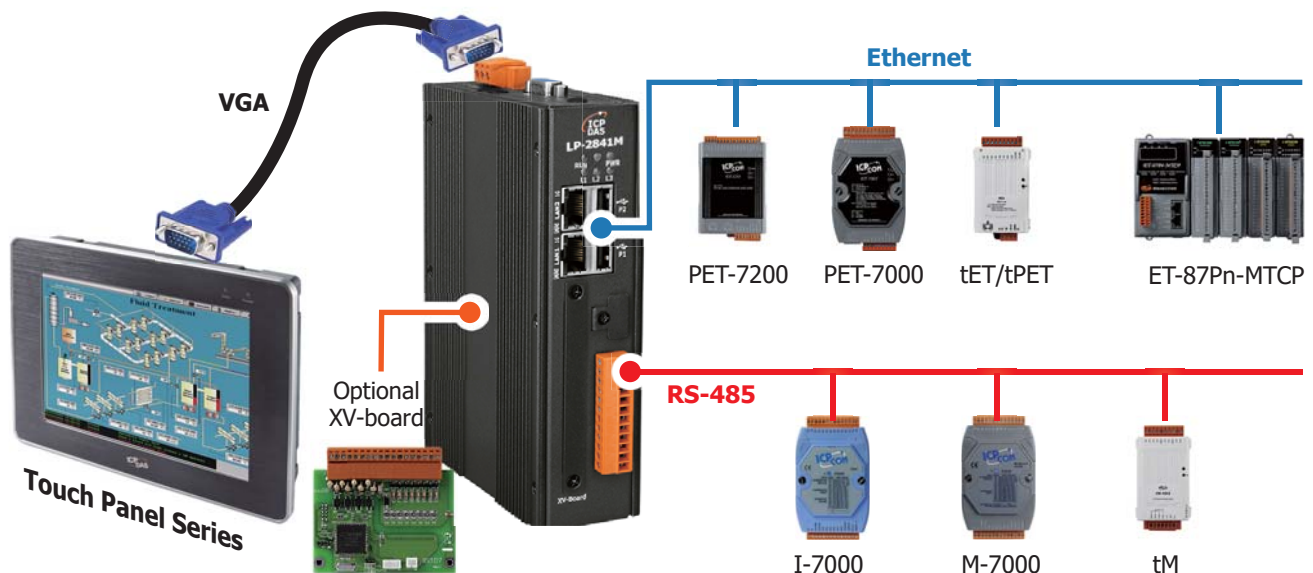
Linux Kernel OS



Main advantage of the LP-2841M is its high quality control system, including its stability 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

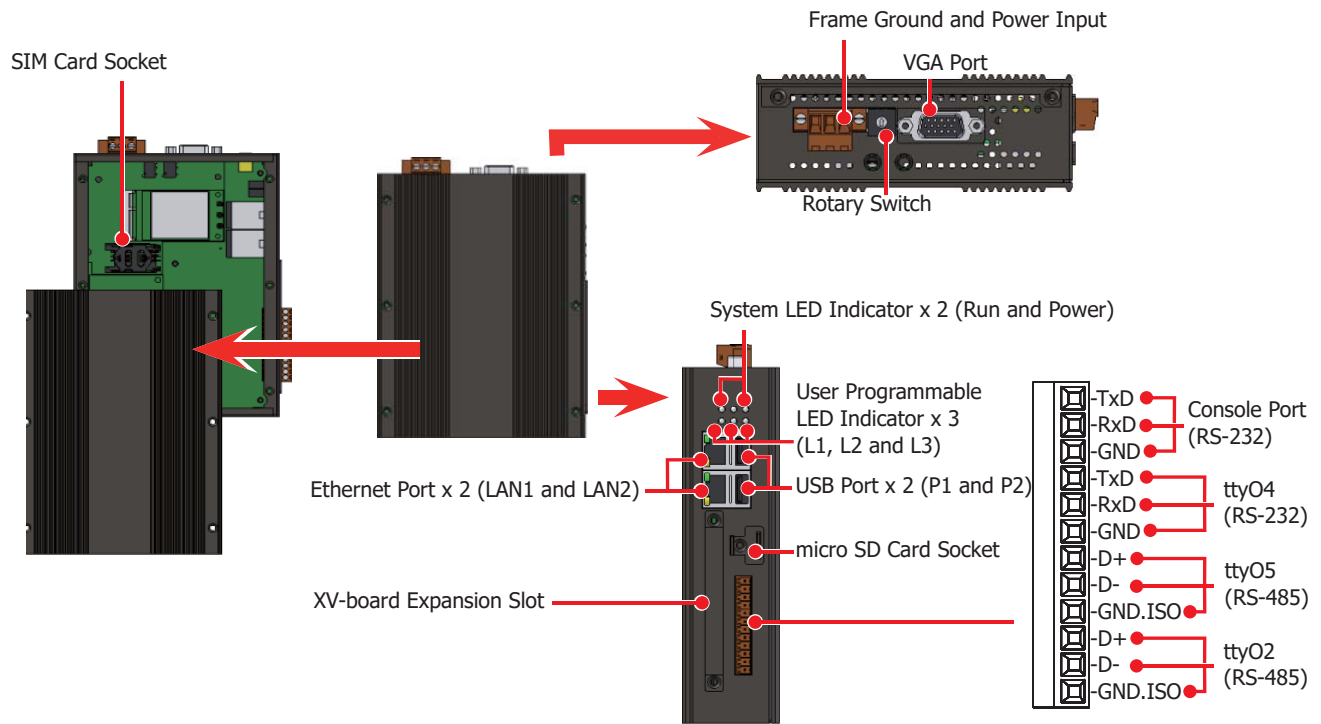
Applications



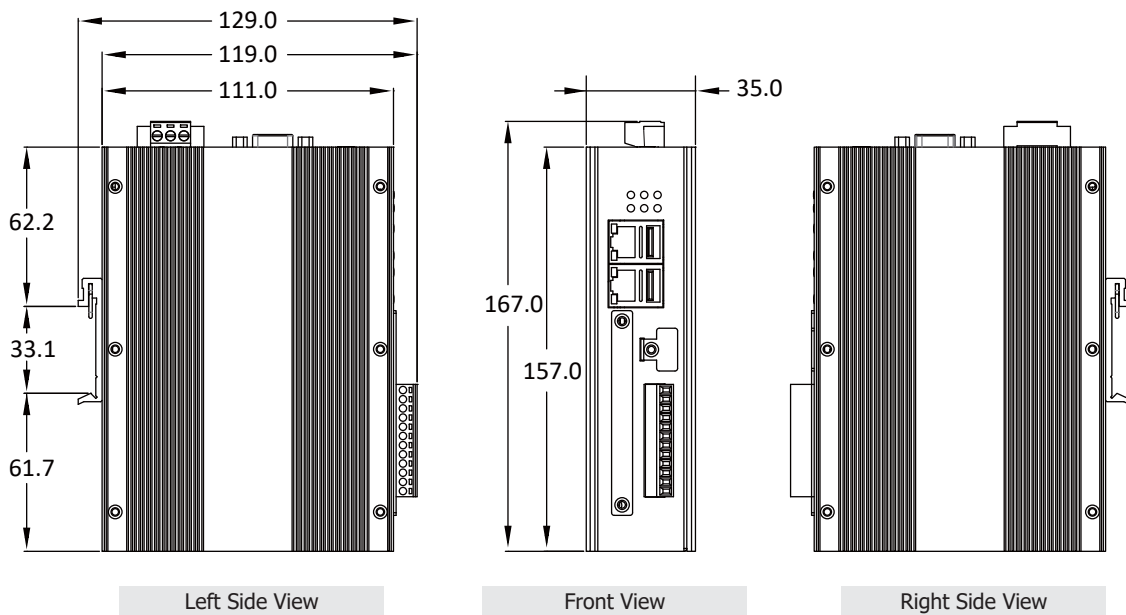
Specifications

System Software	
OS	Linux Kernel 5.4.70
Service	SFTP server, Web server, SSH server
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-); Non-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



Dimensions (Units: mm)



Ordering Information

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

XV-Board	Add-on I/O Expansion Board
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