



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).

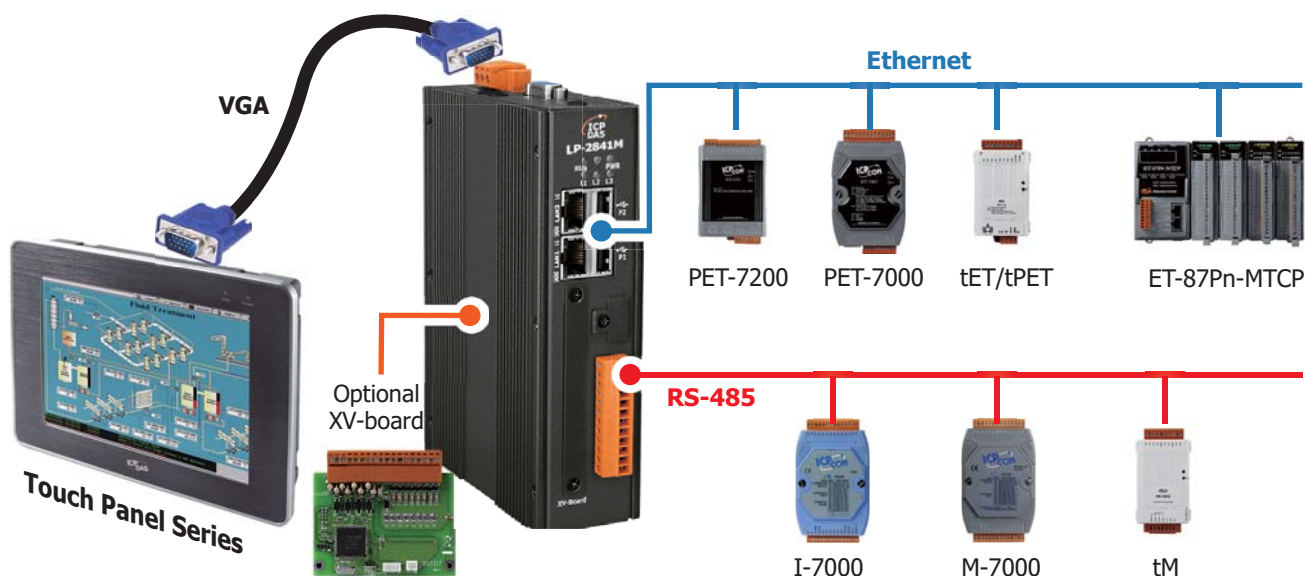
Linux Kernel OS



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

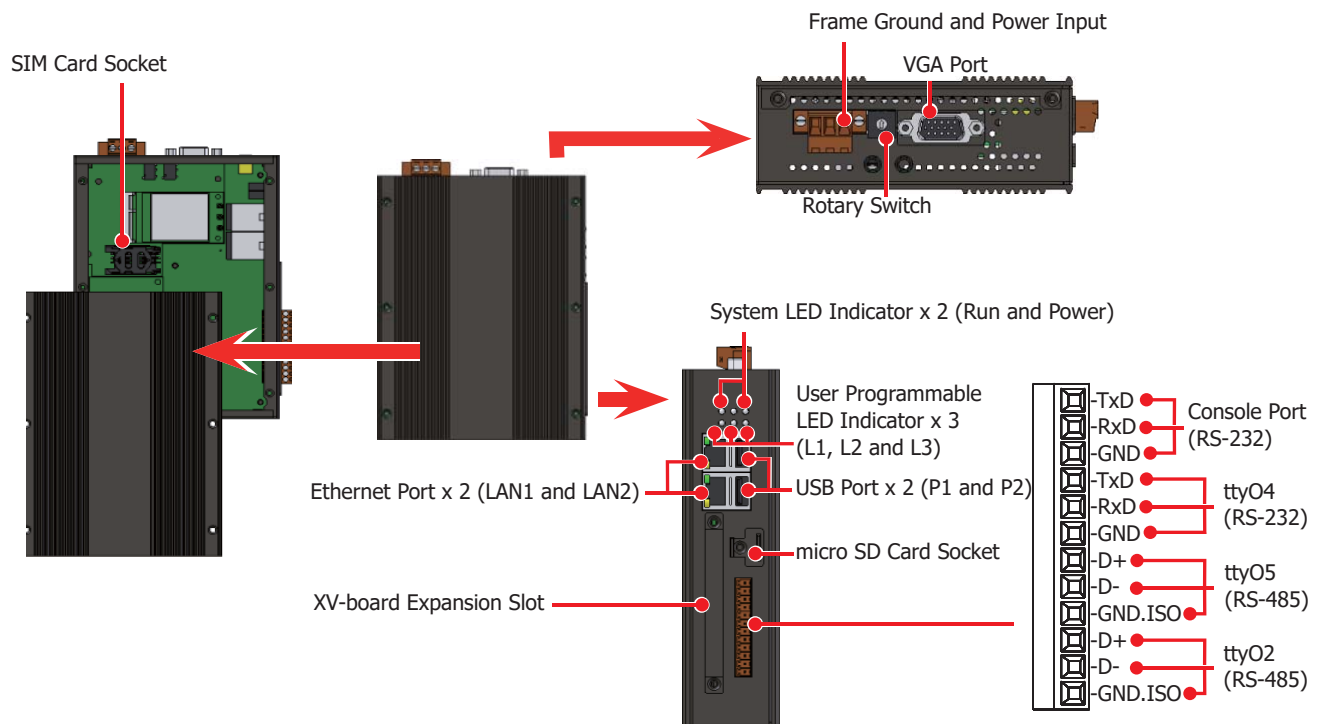
Applications



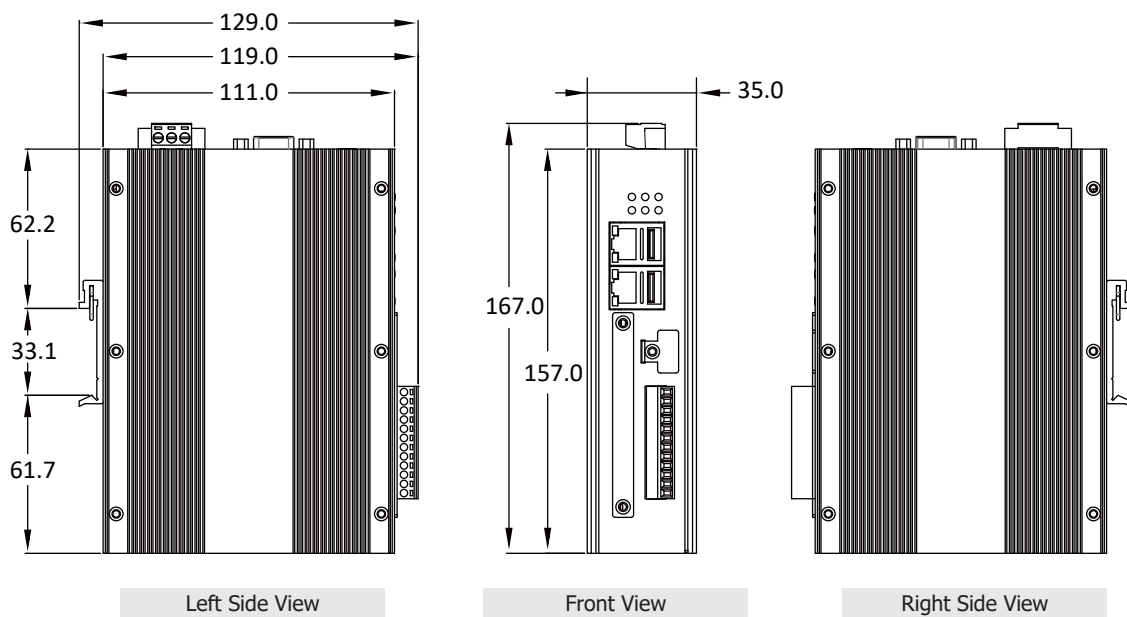
Specifications

| 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

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|--------------------|--|
| 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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