

ClearFog Pro

Datasheet

Marvell ARMADA A388 based network platform



Overview

Introducing the ClearFog family, a flexible IoT gateway platform which harnesses the full potential and robust processing power of the ARMADA SoC – providing a modular powerful board with endless possibilities.

With the ARMADA processor at its core, the ClearFog offers both optimal modulation and fast processing speeds, cutting development costs, TTM and simplifying production process.

ClearFog Base Highlighted Features

- ✿ Based on Marvell's ARMADA A388 SoC
- ✿ Up to 2GB memory size
- ✿ Optimized for networking, routing and storage applications
- ✿ Optional industrial metal enclosure – perfect for OEMs
- ✿ Feature rich
- ✿ Broad software support

System Specifications

| ClearFog Pro | |
|--------------------------------------|--|
| Processor | ARMADA A388 dual core Cortex Arm A9 (up to 1.6Ghz) |
| Memory & Storage | 1GB DDR3L (up to 2GB) M.2 MicroSD / 8GB eMMC (optional)* |
| Connectivity & Interfaces | 2 x mSATA / mPCIe** 1 x USB 3.0 1 x Port dedicated Ethernet 5 x Ports switched Ethernet 1 x SFP |
| I/O | Analog audio / TDM module support GPIO header (mikroBUS) Indication LEDs User push buttons PoE expansion header RTC battery header FTDI (console only) / debug header JTAG header |
| OS | Linux kernel 3.x and 4.x OpenWRT Yocto |
| Power | Wide range 9V-32V Advanced power control Fan control |
| Environment | Ambient temp. (commercial): 0°C to 70°C Enclosed ambient temp. (commercial): 0°C to 40°C CPU die temp. (commercial): 0°C to 115°C |
| | Ambient temp. (industrial): -40°C to 85°C Enclosed Ambient temp. (industrial): -40°C to 55°C CPU die temp. (industrial): -40°C to 105°C |
| | Humidity (non-condensing): 10% - 90% |
| Dimensions (WxLxH) | PCBA: 225mm X 100mm Enclosed: 256mm X 104mm X 33mm |
| Enclosure | Optional metal enclosure |

(*) Assembly option on the SOM

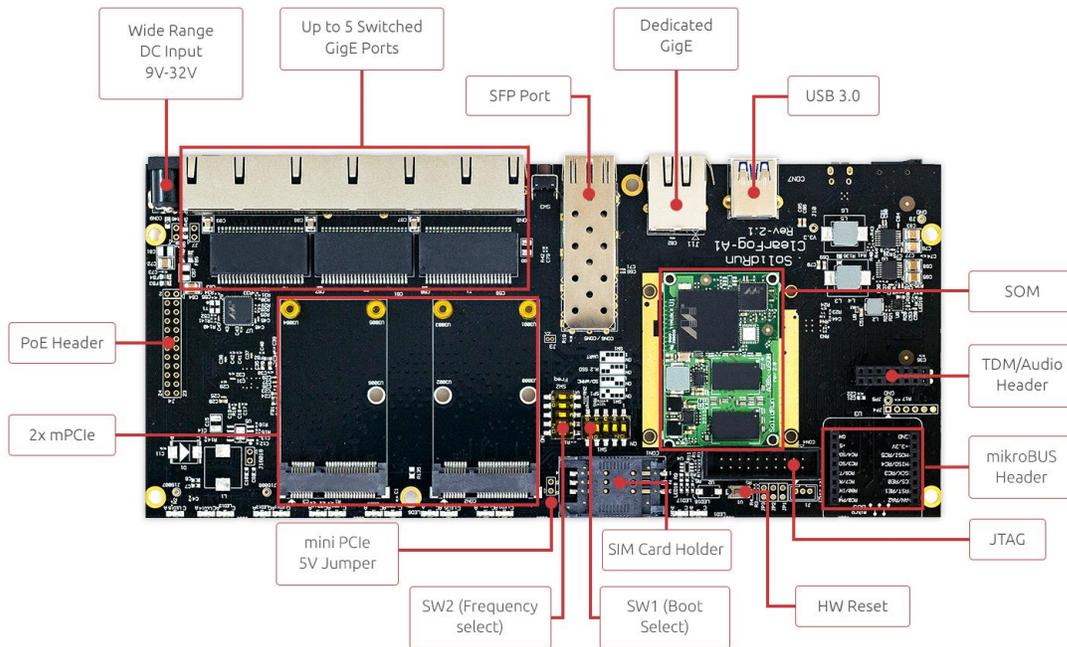
(**) Configurable via u-boot

Available SKUs for ClearFog Base

| SKU | Description |
|-------------------------|---|
| SRM6828S00D01GE000P01CH | SOM A388 Dual ClearFog Pro No SSD 1GB DDR No eMMC Com. Temp R01 Inc. Heatsink |
| SRM6828S00D02GE000P01CH | SOM A388 Dual ClearFog Pro No SSD 2GB DDR No eMMC Com. Temp R01 Inc. Heatsink |
| SRM6828S00D01GE008P01CH | SOM A388 Dual ClearFog Pro No SSD 1GB DDR 8GB eMMC Com. Temp R01 Inc. Heatsink |
| SRM6828S00D02GE008P01CH | SOM A388 Dual ClearFog Pro No SSD 2GB DDR 8GB eMMC Com. Temp R01 Inc. Heatsink |
| SRM6828S00D01GE000P01CE | SOM A388 Dual ClearFog Pro No SSD 1GB DDR No eMMC Com. Temp R01 Inc. Enclosure |
| SRM6828S00D02GE000P01CE | SOM A388 Dual ClearFog Pro No SSD 2GB DDR No eMMC Com. Temp R01 Inc. Enclosure |
| SRM6828S00D01GE008P01CE | SOM A388 Dual ClearFog Pro No SSD 1GB DDR 8GB eMMC Com. Temp R01 Inc. Enclosure |
| SRM6828S00D02GE008P01CE | SOM A388 Dual ClearFog Pro No SSD 2GB DDR 8GB eMMC Com. Temp R01 Inc. Enclosure |
| SRM6828S00D01GE000P01CH | SOM A388 Dual ClearFog Pro No SSD 1GB DDR No eMMC Com. Temp R01 Inc. Heatsink |

(*) Different configurations available for MOQ

ClearFog Pro Layout



Safety Notice

- a. This device is to be used with Certified Power adaptor with output rated 12VDC, 1.5A. Power adapter must meet Limited power source (LPS) requirements.
- b. Power adapter must meet local safety standards and requirements based on product intended use.
- c. Power adapter must meet Operating environment conditions as specified above.

Disposal

Follow local regulations regarding disposal of the product. Dispose of your product in accordance with local regulations. In some areas, the disposal of these items in household or business trash may be prohibited.

Help us protect the environment- recycle!

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Support

For technical support please visit:

Our developer resources – <https://developer.solid-run.com/>

For direct support please contact us at: support@solid-run.com

Documentation

Additional documentation available at:

<https://developer.solid-run.com/products/clearfog-pro/>