ODYSSEY- STM32MP135D with eMMC, Cortex-A7 STM32, Yocto/Buildroot OS, Ethernet ports with WoL, USB Type-A, CSI, LCD, 4Gb DRAM, TF card holder, PoE SKU

102110859

This is a compact STM32 single-board computer that supports multiple operating systems and offers multiple connections, with efficient data transfer and flexible power supply, scalable storage capacity.



Description

This is a compact STM32 single-board computer that supports multiple operating systems and offers multiple connections, with efficient data transfer and flexible power supply, scalable storage capacity.

Feature

- Compact STM32 Single Board Computer: Equip a powerful 32-bit Arm Cortex-A7 STM32 MPU in an 8.5cm x 5.6cm board, supporting Yocto, Buildroot Operating System
- Versatile Connectivity: Offer two 10/100M Ethernet ports, ETH0 supports WoL function, 1x USB Type-A, 1x CSI 30p FPC Connector, 1x LCD 40p FPC Connector, 40-pin GPIO for fast data transfer
- **Expandable Storage:** Provide Kingston 4Gb DRAM and an additional TF card holder for up to 32GB, with 4GB eMMC
- Flexible Power Supply: Support PoE through Ethernet and power supply through Type-C
- Line redundancy in the field of industrial field control: Offer 2 network ports input backup, 2 lines connected to different operators, ensure data stability and security

Description

This compact STM32 single-board computer is an impressive piece of technology that packs a powerful punch. It features a 32-bit Arm Cortex-A7 STM32 MPU that is housed in an 8.5cm x 5.6cm board, making it a convenient and space-saving option for users. Additionally, it supports Yocto and Buildroot operating systems, offering flexibility to users who require different software options.

This board is designed for industrial control applications which can provide line redundancy by allowing for a backup input on two network ports, each connected to a different network operator. This ensures data stability and security in the event of a network failure or outage.

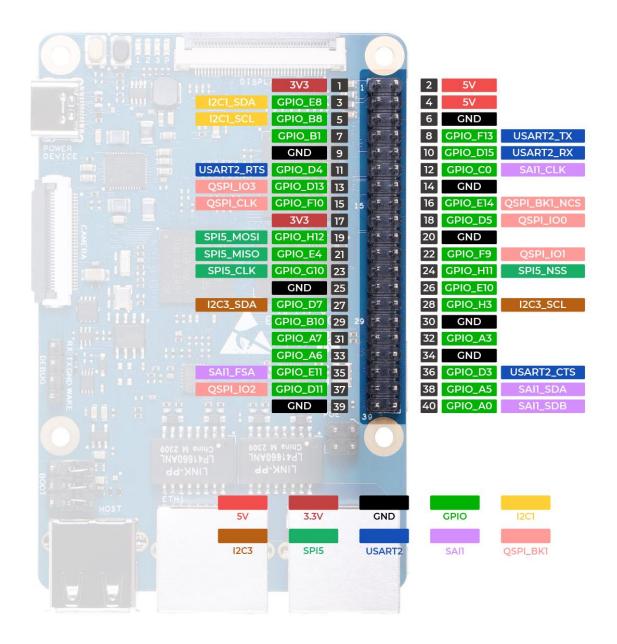
With its versatile connectivity options, this single-board computer is an excellent choice for users who require multiple connections. It offers two 10/100M Ethernet ports, ETH0 supports WoL function, a USB Type-A port, a CSI 30p FPC Connector, and an LCD 40p FPC Connector. Additionally, it features a 40-pin GPIO that provides fast data transfer, making it ideal for users who require efficient data transfer.

In addition to its impressive connectivity options, the board offers expandable storage capacity to users. It features Kingston 4Gb DRAM and an additional TF card holder that can hold up to 32GB, with 4GB eMMC, providing users with ample storage space for their needs. This feature makes it an excellent choice for users who require a scalable storage option.

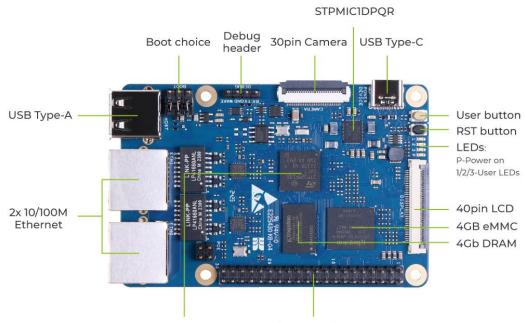
It also features flexible power supply options, which makes it an ideal choice for users who require adaptability in their computing needs. It supports PoE through Ethernet and power supply through Type-C, allowing users to choose the power supply option that best suits their needs. Overall, this compact STM32 single-board computer is an excellent choice for users who require a powerful, efficient, and flexible computing option.

Application

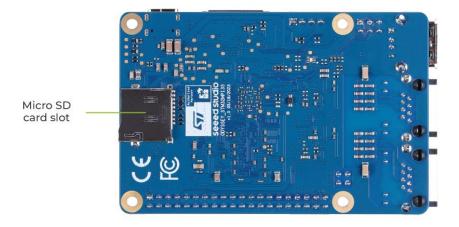
- Networked Monitoring Device
- Home Security System
- Portable Media Player
- Smart Vending Machine



Module Description

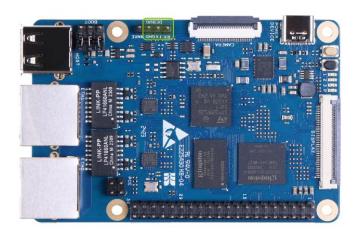


STM32M135D PRI 40pin compatible header



Debug Pin Connection

Debug pin connection



Boot choice

SD card boot:

No jump caps used on 0/1/2, as below shows.



eMMC boot:

Short circuit with jump caps on 0/1/2, as below shows.



USB boot:

Short circuit with jump caps on 0 and 2, as below shows.



Specification

Specification	Details
Processor	32-bit Arm Cortex-A7 STM32 MPU
Operating System	Yocto, Buildroot
Connectivity	2x 10/100M ports, ETH0 supports WoL function, 1x USB Type-A, 1x CSI 30p FPC Connector, 1x LCD 40p FPC Connector, 40-pin GPIO
Storage	Kingston 4Gb DRAM, additional TF card holder for up to 32GB, 4GB eMMC
Power Supply	PoE through Ethernet, power supply through Type-C
Bare Board Dimension	85x56x17mm
Board Weight	G.W 36g