

- ▶ Single Board Computer based on solderable, pin-compatible DHCOS STM32MP2x SOM
- ▶ Industrial grade, 10+ years available
- ▶ Mainline Linux support (also for Vivante GPU)
- ▶ Security Features e.g. Secure Boot / Storage
- ▶ Connectivity: Gbit Ethernet, WiFi/BT
- ▶ Multimedia: 3D GPU, display, video, camera
- ▶ STPMIC25 supports low power modes

Technical Data

Board type	Single Board Computer
CPU details	2x ARM Cortex-A35 with 1.2 GHz 1x ARM Cortex-M33 up to 400 MHz
CPU vendor	ST
CPU type	Cortex-A35, Cortex-M33
Co-processor available	yes
Number of cores	2

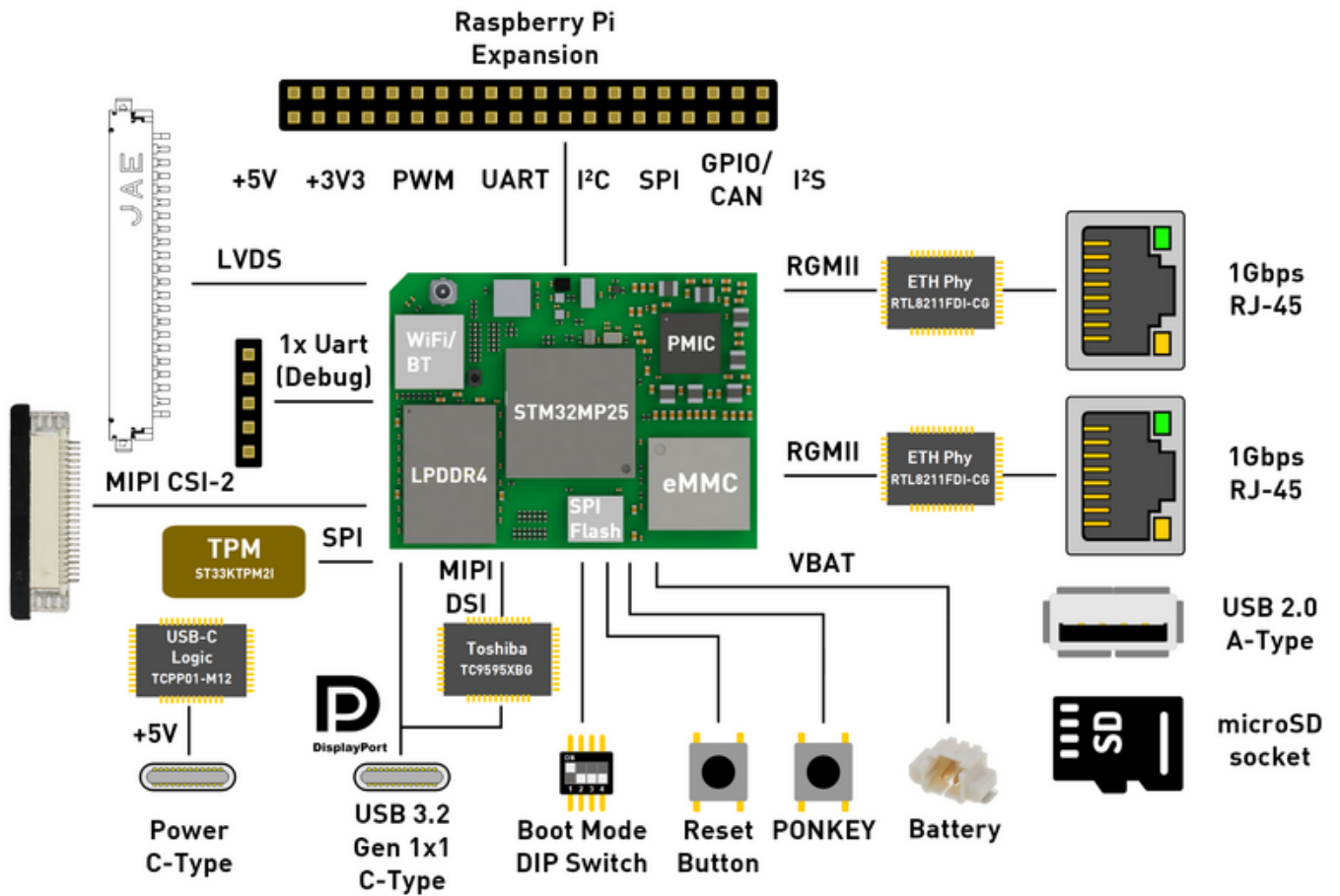
PMIC	STPMIC25D
Features	Neuronal Processing Unit (NPU) VeriSilicon® with up to 900 MHz and 1.35 TOPS Video decode / encode H264 up to 1080p60
Security	Secure boot TrustZone® peripherals active tamper environmental monitors display secure layers hardware accelerators Complete resource isolation framework “On-the-fly” DDR encryption/decryption (AES-128)
LPDDR4 DRAM	4 GB
DRAM details	LPDDR4-2400 32-bit
eMMC flash	16 GB
SPI NOR flash	4 MB
EEPROM	4 kB
microSD socket	yes
Additional RTC	Temp. compensated RTC RV-3032-C7
Bluetooth available	yes
Bluetooth version	Bluetooth® v5.4 BR/EDR/LE
WiFi available	yes
WiFi version	Tri band 2.4 GHz, 5 GHz and 6 GHz for IEEE802.11a/b/g/n/ac/ax
Ethernet	2x 1 Gbit/s
USB	1x USB-C 3.2 Gen 1x1 with DisplayPort alt. mode support 1x USB 2.0 high-speed
LVDS	1x Dual Link, 2x 4-lane LVDS connector Up to 1.1 Gbit/s per lane Up to QXGA (2048 × 1536) @60 fps

MIPI-CSI2	1x 2-lanes connector up to 2.5 Gbit/s 5 Mpixels @30 fps
UART (serial console)	1x TTL
TPM (Trusted Platform Module)	TPM 2.0 device ST33KTPM2I
Battery connector	1x PicoBlade coin cell connector
Buttons	1x power, 1x reset
Boot mode	4 bit boot mode switch
Debug interface	JTAG
BSP	Linux Yocto (Debian on request)
Power supply	5 VDC, USB Type-C power supply port
Dimensions	85 x 56 x 18 mm

Raspberry Pi 40-pin Expansion

I2C	1x
UART	2x (with RTS and CTS)
SPI	1x (QPSI on request)
I2S/SAI	1x
PWM	2x
CAN	2x
GPIO	up to 28x

Block Diagrams



Configurations

Item Number	Model (other configurations on request)	Product description
HS00048	DHSBC STM32MP25C	DHSBC STM32MP25 STM32MP25C with 1.2GHz, Crypto, 4GByte LPDDR4 meomory, 4kbit EEPROM, 16GByte eMMC, SPI flash, WIFI/BT, RTC, USB-C 3.2 Gen 1x1 port with DisplayPort, 1x USB 2.0 connectror, TPM, Rasberry Pi expansion Ta - 25 to +85°C

* Other configurations on request