

OSM-L with MediaTek Genio 510 processor

MOSM-MM20E

- MediaTek Genio 510 2 x A78 2.0 GHz + 4 x A55 2.0 GHz
- NPU with up to 3.2 TOPS
- Onboard 4GB LPDDR4 memory and 32GB storage
- Multiple video outputs
- Legacy I/O and high-speed interface
- LGA grid array with 662 contacts



Specifications

General

OSM Standard v1.1

Support OSM Size-L SoC module

CPU

MediaTek Genio 510 2 x A78 2.0 GHz + 4 x A55 2.0 GHz

Storage

1x 32GB onboard eMMC 5.1 flash
64GB by project

Memory

1x 4G onboard LPDDR4, 3733MT/s
8GB by project

Power Input

5V DC

Operating Systems

Embedded Linux (Yocto distribution)
Ubuntu v22.04

I/O Interface

Audio

1x I2S

PCIe

1x PCIe x1 (Gen3)

USB

3x USB2.0/ (2 port with dual role)
1x USB3.0

Display

1x HDMI or DP
1x MIPI DSI
1x DSI

Video

Integrated in CPU

Camera

1x 4 lanes CSI

Ethernet

1x GbE LAN (RGMII)

Other Legacy I/O

3x GPIO, 2x I2C, 3x UART
2x SPI, 2x CAN Bus, 2x SDIO (4bit)
2x ADC, 4x PWM, 1x JTAG

Mechanical

Form Factor

SGeT OSM Specification v1.1
OSM size L
662 pins

Dimension

45mm(L) x 45mm (W)

Environmental

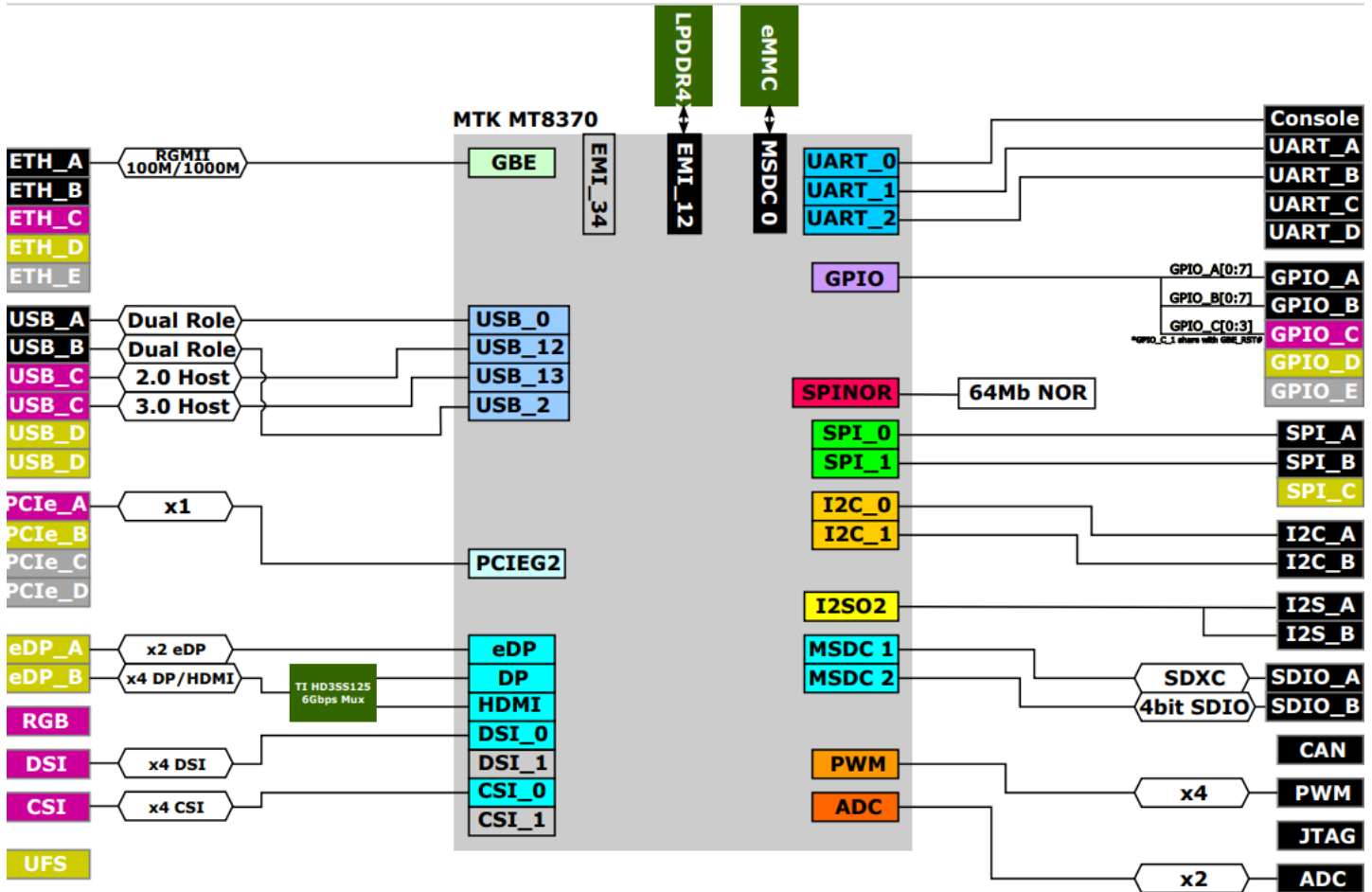
Operating Temperature

-20°C ~ 85°C

Relative Humidity

5 %~ 95 % RH (non-condensing)

Block Diagram



O S M L

Headquarters

