Embedded Module

Open Standard Module™ - iesy EHL OSM-LE

Technical Concept

▶ Platform:	Intel® Elkhart Lake x6413E
▶ RAM:	4 GByte
▶ Flash-Memory:	64 GB eMMC (only for eMCP version)
▶ Dimension:	45 mm x 45 mm
▶ Footprint:	OSM Size-L Land Grid Array (LGA) with 662 contacts
▶ Supply:	5V via LGA contacts
▶ Software:	Windows / Yocto Linux
▶ Temperature range:	
› Operating:	0 °C to +70 °C
› Storage:	-40 °C to +85 °C

▶ Features & Interfaces

- 3x Ethernet 100M/1G (2x RGMII, 1x SGMII)
- 2x USB 2.0 Host
- 2x USB 3.0 Host with USB 2.0 support
- 4x UART (2x with RTS/CTS)
- 13x GPIO, 4x PWM
- 3x SPI (1x connected to BIOS & TPM)
- 2x I2C, 2x I2S
- 2x SDIO (1x 4 bit, 1x 8bit)
- 1x CAN (CAN-FD), 1x JTAG
- 2x PCIe x1
- 4x PCIe x1 / 2x PCIe x2 / 1x PCIe x4 / 1x PCIe x2 + 2x PCIe x1
- 2x PCIe x1 / 1x PCIe x2
- 1x eDP (4 lanes), 1x DP/HDMI (2 lanes)

About OSM™

The Open Standard Modules™ specification was adopted by the SGeT e.V. in 2019. The new standard was developed to meet future requirements in terms of **flexibility**, **scalability**, but also **costs**. OSM™ solder-down modules can be **individually adapted** to the respective customer requirements. For this purpose, the individual modules can be made **available to the SMT process** by means of tray & reel packaging and processed automatically. The OSM™ series includes in total four different form factors.

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