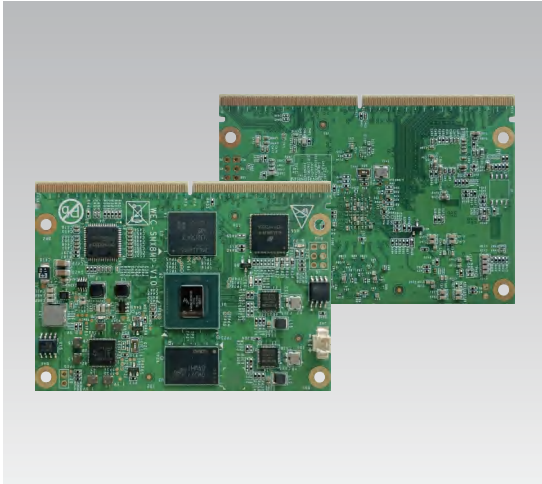




# WEC-SMX8MP

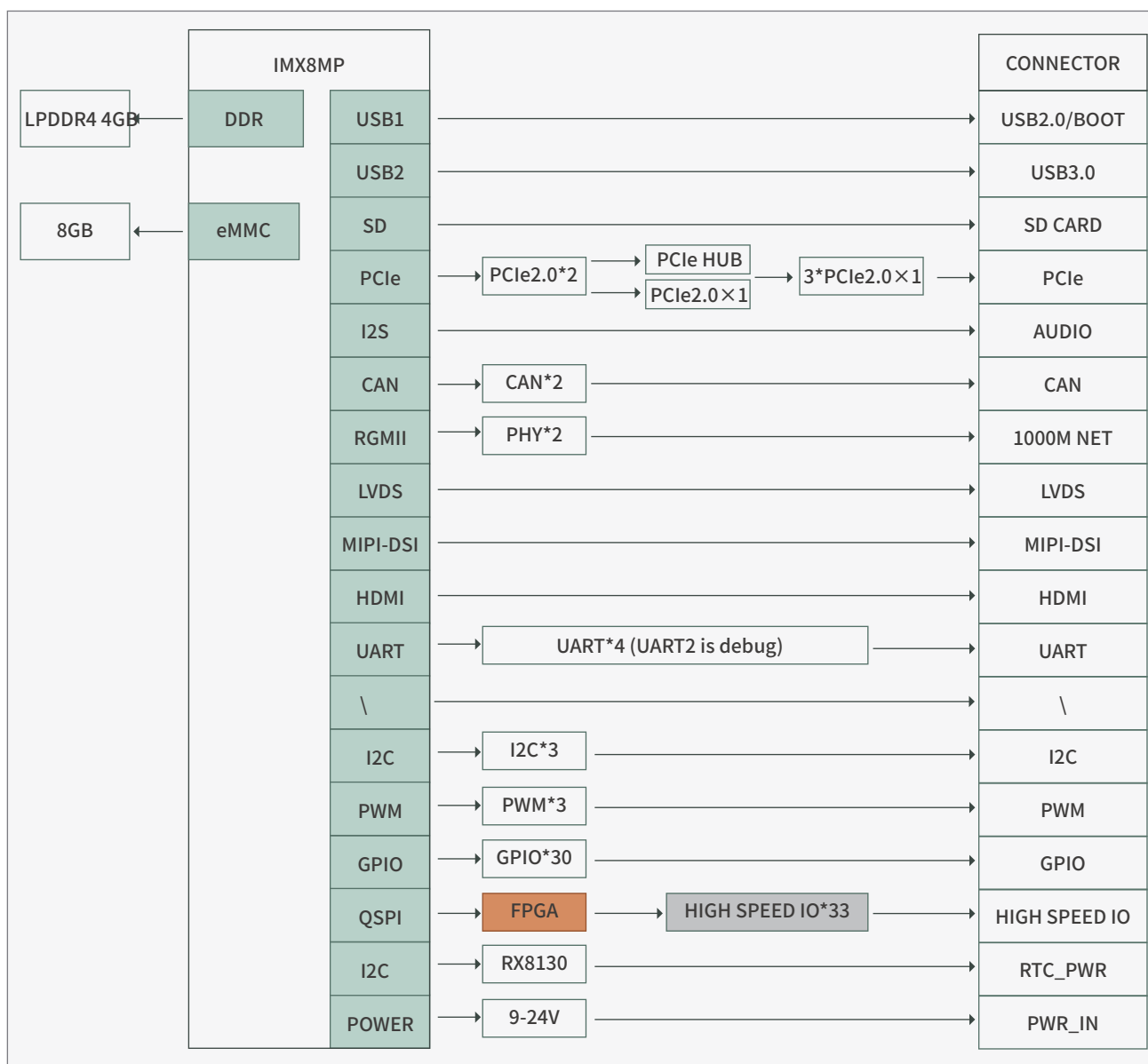
## FEATURE:

- Belong to the "Sprite" series core-board, featuring excellent compatibility and being compatible with other core boards of the Sprite series
- NXP i.MX 8M Plus, 4×ARM Cortex-A53+Cortex-M7
- LPDDR4 memory, up to 8 GB
- 2×GbE, 10/100/1000Mbps
- 2×USB 3.0, 4×UART, 2×CAN, 30×GPIO
- 33 high-speed I/Os, provided by the integrated FPGA

## SPECIFICATION

|                         |                 |                                                                              |
|-------------------------|-----------------|------------------------------------------------------------------------------|
| <b>Product Model</b>    | Product Model   | WEC-SMX8MP                                                                   |
| <b>CPU</b>              | CPU Model       | NXP i.MX 8M Plus                                                             |
|                         | Core            | 4×ARM Cortex-A53 & 1×ARM Cortex-M7                                           |
|                         | Frequency       | 1.60 GHz                                                                     |
| <b>Memory</b>           | Type            | LPDDR4L, 3200MT/s, Onboard Memory                                            |
|                         | Max Capacity    | 8 GB                                                                         |
| <b>Storage</b>          | Type            | eMMC 5.1                                                                     |
|                         | Capacity        | 8/16/32/64 GB                                                                |
| <b>Display</b>          | HDMI            | 1×HDMI 2.0a                                                                  |
|                         | LVDS            | 2×LVDS, 4/8 channel                                                          |
|                         | MIPI-DSI        | 1×4-channel MIPI-DSI                                                         |
| <b>Ethernet</b>         | LAN             | 2, 10/100/1000 Mbps, YT8511                                                  |
| <b>I/O Interface</b>    | USB             | 2×USB 3.0, including 1 boot                                                  |
|                         | UART            | 4, TTL, UART3 cannot be used together with SPI, including 1-channel of debug |
|                         | CAN             | 2                                                                            |
|                         | GPIO            | 30                                                                           |
|                         | High-speed IO   | 33, provided by the integrated FPGA                                          |
|                         | PCIe            | 1×single-lane PCIe 2.0                                                       |
|                         | SPI             | 1, cannot be used together with UART                                         |
|                         | PWM             | 3                                                                            |
|                         | I2C             | 3                                                                            |
|                         | I2S             | 1                                                                            |
|                         | SD              | 1                                                                            |
| <b>Operating System</b> | OS              | Android, Linux, FreeRTOS                                                     |
| <b>Power Supply</b>     | Type            | DC                                                                           |
|                         | Input Voltage   | 9-24 V                                                                       |
| <b>Environment</b>      | Operating Temp. | Common grade: -10~60°C, Industrial grade: -40~85°C                           |
|                         | Storage Temp.   | -40~85°C                                                                     |
|                         | Operating Humi. | 10-90% @ 40°C, non-condensing                                                |
|                         | Storage Humi.   | 0-95% @ 60°C, non-condensing                                                 |
| <b>Dimension</b>        | Outside Dime.   | 82mm×58mm                                                                    |

## BLOCK DIAGRAM



## ORDER INFORMATION

| 产品型号        | CPU          | 内存      | eMMC      | 以太网 | UART | CAN | GPIO | 高速IO | PCIe | 工作温度       |
|-------------|--------------|---------|-----------|-----|------|-----|------|------|------|------------|
| WEC-SMX8MP  | i.MX 8M Plus | 2/4/8GB | 8/16/32GB | 2   | 4    | 2   | 30   | 33   | 1    | -20 ~ 60°C |
| WEC-SMX8MPI | i.MX 8M Plus | 2/4/8GB | 8/16/32GB | 2   | 4    | 2   | 30   | 33   | 1    | -40 ~ 85°C |

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