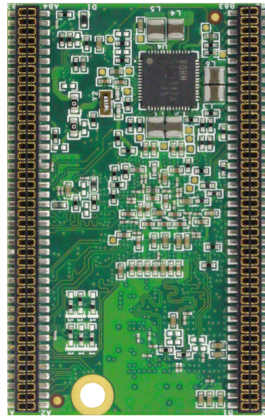
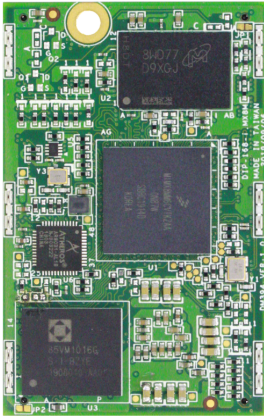


# NX8MM-D168



- ◆ i.MX8M Mini
- ◆ Quad core Cortex-A53 1.6GHz
- ◆ 3D GPU / 1080p60 VPU
- ◆ 10+ years life cycle
- ◆ Industrial Grade

## Specification

|                          |                                                              |
|--------------------------|--------------------------------------------------------------|
| <b>CPU</b>               | NXP i.MX8M Mini Quad, 4 x Cortex-A53 1.6GHz                  |
| <b>GPU</b>               | GCNanoUltra for 3D acceleration<br>GC320 for 2D acceleration |
| <b>VPU</b>               | Decode: 1080p60, H.265, H.264<br>Encode: 1080p60, H.264      |
| <b>Co-CPU</b>            | Cortex-M4                                                    |
| <b>RAM</b>               | Onboard LPDDR4 1GB/2GB                                       |
| <b>Storage</b>           | Onboard eMMC 4GB ~ 64GB, MLC / SLC                           |
| <b>Display</b>           | MIPI-DSI, 4 data lanes, up to 1920x1080 60Hz                 |
| <b>Camera</b>            | MIPI-CSI, 4 data lanes                                       |
| <b>Ethernet</b>          | Gigabit Ethernet x 1                                         |
| <b>Audio</b>             | Up to 3 x I2S/SAI , S/PDIF input/output                      |
| <b>PCIe</b>              | Gen 2.1 PCIe x 1                                             |
| <b>USB</b>               | USB 2.0 x 2                                                  |
| <b>UART</b>              | Up to 4 x UART                                               |
| <b>eMMC/SDIO</b>         | Up to 2 x eMMC/SD/SDIO                                       |
| <b>SPI</b>               | Up to 3 x SPI                                                |
| <b>I2C</b>               | Up to 3 x I2C                                                |
| <b>PWM</b>               | Up to 4 x PWM                                                |
| <b>GPIO</b>              | Up to 40 x GPIO                                              |
| <b>Operating Temp.</b>   | 0° to 60° C or -40° to 85° C                                 |
| <b>Relative humidity</b> | 10% to 90%                                                   |
| <b>Dimensions</b>        | 55mm x 35mm                                                  |
| <b>Weight</b>            | 8 g                                                          |
| <b>Connector</b>         | 168 pins. 2 x 2 x 42 , pitch 1.27mm, Female                  |
| <b>Power input</b>       | +5V                                                          |
| <b>OS Support</b>        | Yocto Linux, Window 10 IoT Core                              |

## Ordering Information

|                    |          |          |          |          |                                                                       |
|--------------------|----------|----------|----------|----------|-----------------------------------------------------------------------|
| <b>NX8MM-D168-</b> | <b>4</b> | <b>2</b> | <b>C</b> | <b>S</b> | <b>I</b>                                                              |
|                    |          |          |          |          | I : -40~85°C<br>C: 0~60° C                                            |
|                    |          |          |          |          | <u>eMMC</u><br>S: SLC<br>M: MLC                                       |
|                    |          |          |          |          | <u>eMMC</u><br>A : 4GB<br>B : 8GB<br>C : 16GB<br>D : 32GB<br>E : 64GB |
|                    |          |          |          |          | <u>DRAM</u><br>1 : 1GB<br>2 : 2GB                                     |
|                    |          |          |          |          | <u>CPU</u><br>4 : Quad Core<br>2 : Dual Core                          |

\* 6-weeks carrier board design service is available.

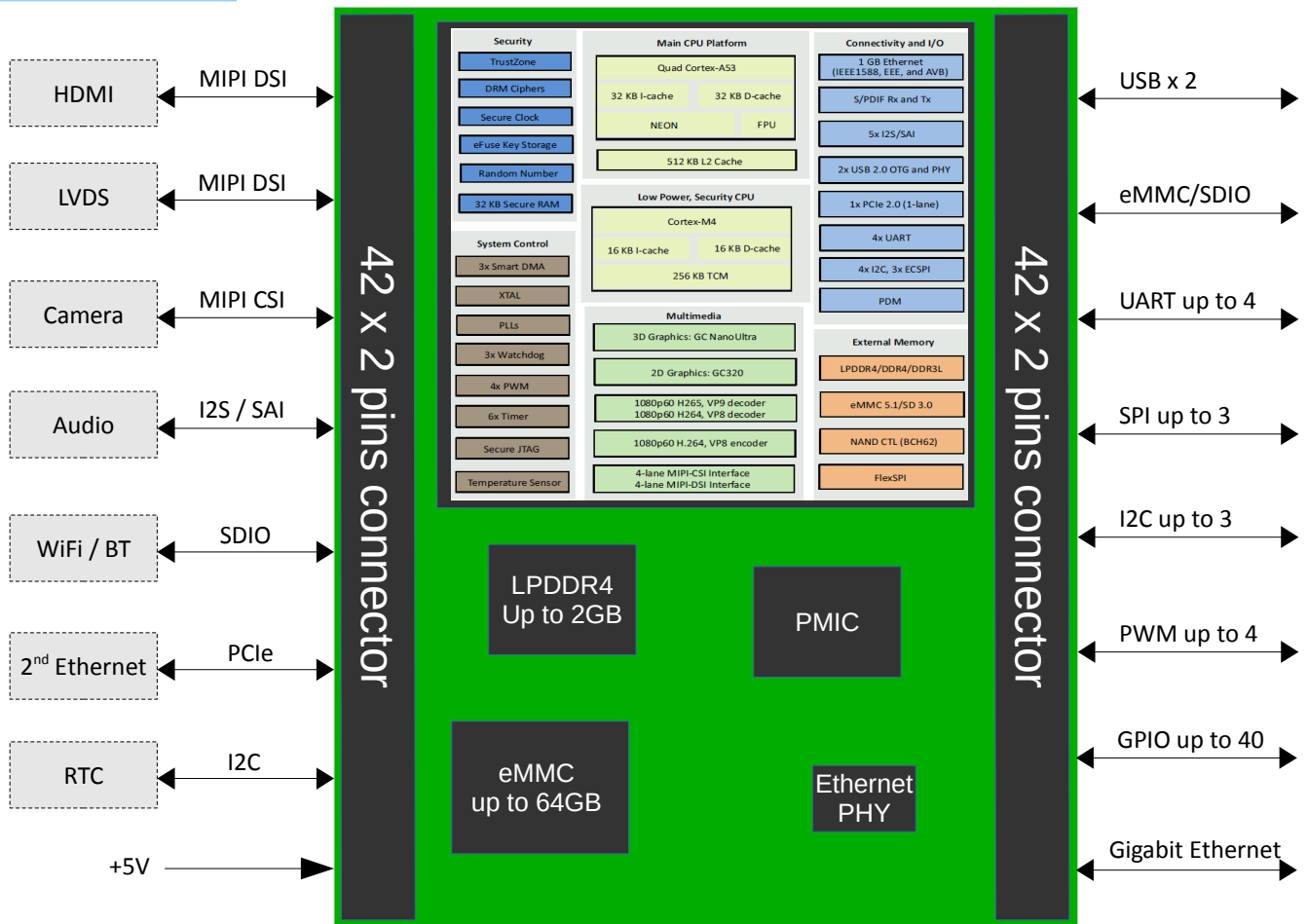
\* Conformal coating and Underfill service is available.



Evaluation Kit : EBOX I.MX8M

# NX8MM-D168

## Block Diagram



## Dimension

