

AT A GLANCE

- Full-featured industrial carrier board for commercially deployable embedded vision systems
- Powerful and flexible hardware thanks to NVIDIA Xavier NX, TX2 NX and Jetson Nano module support
- "One fits all" – manufacturer-independent modular interfacing with generic camera driver
- Reduced system footprint for easy integration in space-constrained vision systems
- State-of-the-art hardware backbone for the STEMMER IMAGING "out-of-the-box" industrial embedded solution

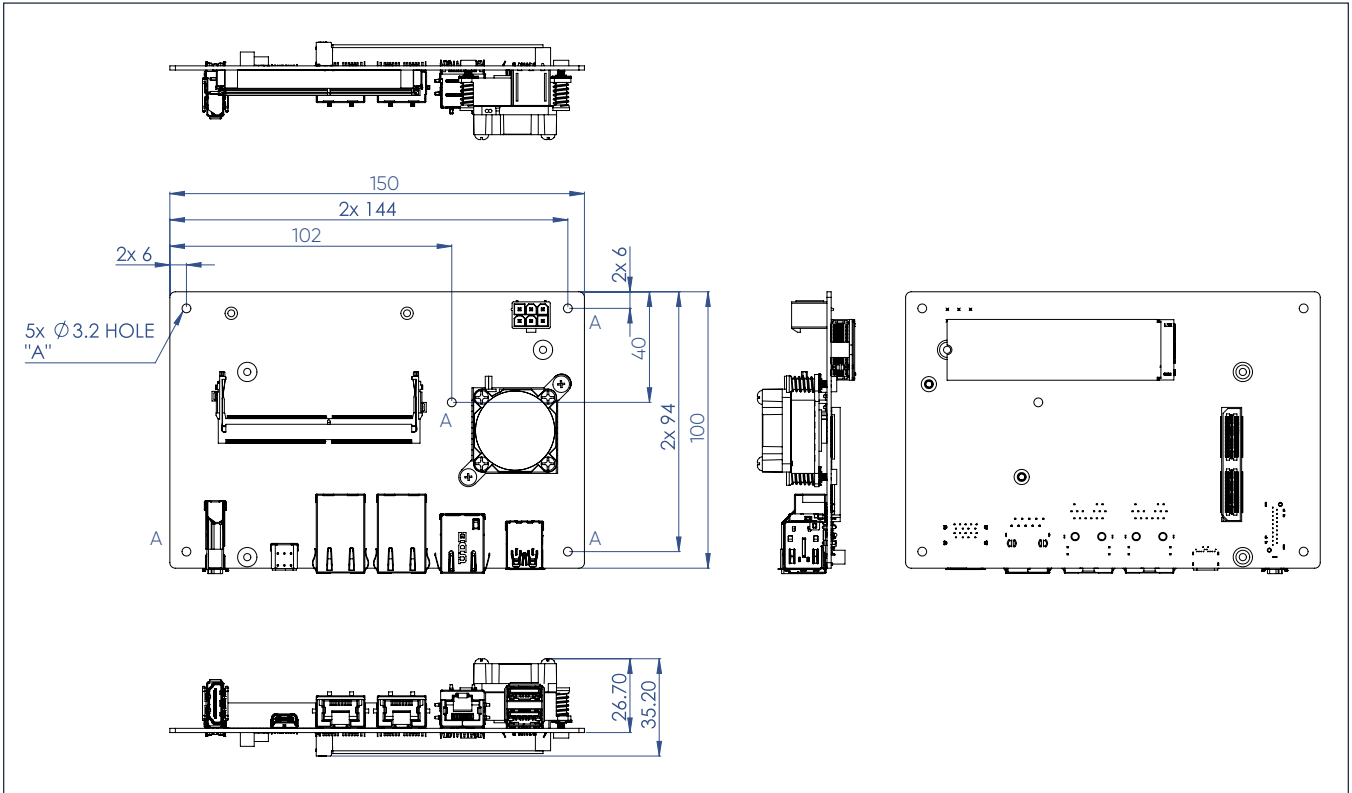
| SPECIFICATIONS | SI ME CARRIERBOARD- NX-8GB-01 | SI ME CARRIERBOARD- NX-16GB-01 | SI ME CARRIERBOARD- TX2-NX-01 | SI ME CARRIERBOARD- NANO-01 |
|-----------------------------|---|---|---|---|
| MODULE SUPPORT | | | | |
| Module | NVIDIA Xavier NX 8GB | NVIDIA Xavier NX 16GB | NVIDIA TX2 NX | NVIDIA Jetson Nano |
| Memory | 8 GB | 16 GB | 4 GB | 4 GB |
| Storage | 16 GB eMMC | 16 GB eMMC | 16 GB eMMC | 16 GB eMMC |
| REAR PANEL I/O PORTS | | | | |
| LAN | 1x 1GbE (RJ45) 2x 10GbE (RJ45) | 1x 1GbE (RJ45) 2x 10GbE (RJ45) | 1x 1GbE (RJ45) 2x 10GbE (RJ45) ^{*1} | 1x 1GbE (RJ45) 2x 10GbE (RJ45) ^{*2} |
| USB | 2x USB3.2 Gen2 Type-A ^{*3} 1x USB2.0 Type-C (OTG) | 2x USB3.2 Gen2 Type-A ^{*3} 1x USB2.0 Type-C (OTG) | 2x USB3.2 Gen1 Type-A ^{*4} 1x USB2.0 Type-C (OTG) | 2x USB3.2 Gen1 Type-A ^{*4} 1x USB2.0 Type-C (OTG) |
| Video | 1x HDMI | 1x HDMI | 1 x HDMI | 1 x HDMI |
| PERIPHERALS | | | | |
| M2 Interface | M.2 M key 2280 ^{*5} | M.2 M key 2280 ^{*5} | M.2 M key 2280 ^{*6} | N/A |

^{*1} Maximum bandwidth shared approx. 800 MByte/s (due to 2x PCIe Gen2 interface of NVIDIA Jetson TX2)
^{*2} Maximum bandwidth shared approx. 1,6 GByte/s (due to 4x PCIe Gen2 interface of NVIDIA Jetson Nano)
^{*3} Maximum bandwidth shared approx. 1,25 GByte/s (due to USB 3.1 mode of NVIDIA Jetson Xavier NX)
^{*4} Maximum bandwidth shared approx. 600 MByte/s (due to USB 3.0 Super Speed mode of NVIDIA Jetson TX2/Nano)
^{*5} Maximum bandwidth approx. 1 GByte/s
^{*6} Maximum bandwidth approx. 500 MByte/s

SPECIFICATIONS FOR ALL MODELS

| | | | |
|--------------------------------|--|-----------------------------|---|
| INTERNAL I/O CONNECTORS | | ENVIRONMENTAL | |
| I/O | 40-pin header (I ² S/Audio Clock/2x I ² C/2x SPI/3x UART) | Humidity | 10 ~ 90% @ 40 °C, (non-condensing) |
| MIPI CSI | MIPI CSI-2 2 x 4 lane (compatible with Allied Vision adapter board) | Temperature | Operating Temperature: 0 °C ~ +55 °C Storage Temperature: -45 °C ~ 80 °C |
| POWER | | Acoustic | N/A |
| Input Voltage | 9~36 VDC | Shock | N/A |
| FORM FACTOR | | Vibration | N/A |
| Dimensions | 150 mm x 100 mm | Certification | on request |
| OPERATING SYSTEM | | ACCESSORIES | |
| OS | Ubuntu 18.04 (Base on NVIDIA Jetpack 4.6.1) | SYS FAN SINK XAVIER NX | Fan sink only for XAVIER NX |
| | | SYS FAN SINK TX2 NX | Fan sink only for TX2 NX |
| | | SYS FAN SINK NANO | Fan sink only for NANO |
| | | SYS PSU ADAPTER EU SI ME CB | PSU all SI ME CARRIERBOARDS |

DIMENSIONS



BLOCK DIAGRAM

