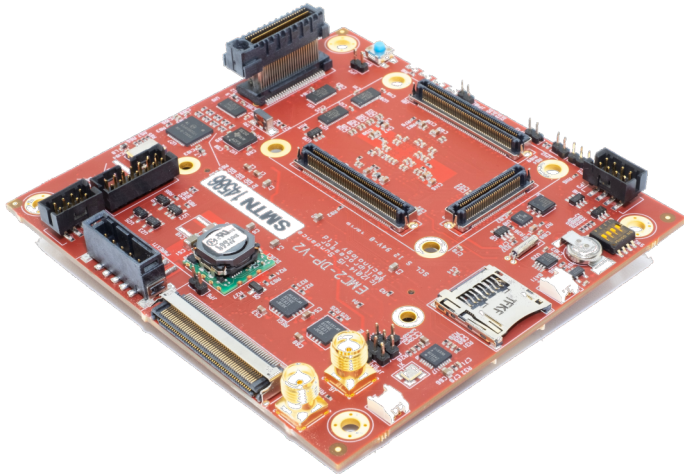


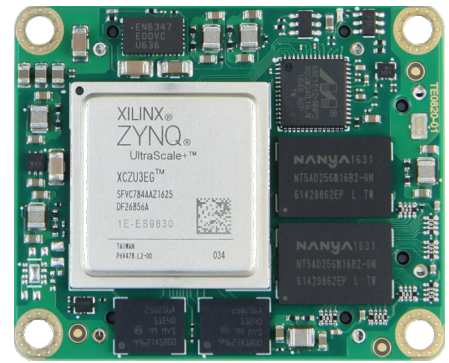
PC/104 OneBank Carrier for SoC Modules

Providing the base for all of our PC/104 integrated systems the EMC²-SoM is a PCIe/104 OneBank[®] Carrier for a Trenz compatible 40mm x 50mm SoC Module.



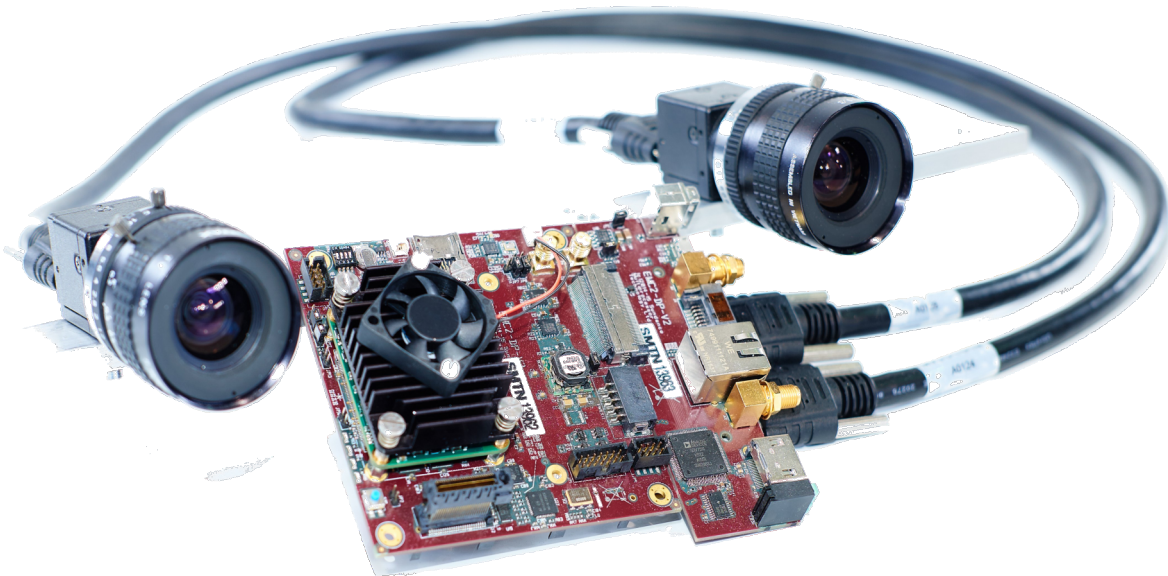
sundance.technology/emc2-som

ZYNQ
UltraSCALE+



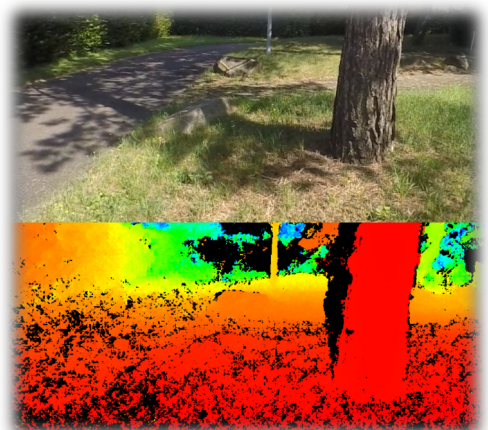
The EMC²-SoM also provides expansion for a VITA57.1 FMC[™] LPC I/O board.

The PCIe/104 OneBank[®] design enables the EMC²-SoM to be added to robust and rugged installations for various commercial, medical, industrial and military uses.



USING THE EMC² TO PROVIDE REAL-TIME ON-BOARD OBSTACLE AVOIDANCE FOR UAVS BASED ON EMBEDDED STEREO VISION.

The increase in the use of UAVs requires an improvement of their usability and safety. UAVs are equipped with multiple sensors to monitor their surroundings for imaging purposes and also for obstacle avoidance. Using stereo cameras to calculate the distance to surrounding objects offers a more cost effective solution than using distance sensors.



The VCS-1 system is an EMC² and FM191 combination which features:

- High performance and low power consumption (24V @ 1.1A)
- Compatible with a wide range of commercially available sensors and actuators
- Raspberry PI and Arduino compatible
- 4x USB3.0 ports for interfacing with multiple sensors
- MQTT and OpenCV compatible
- ROS compatible, ROS2 ready and HIPPEROS ready
- Will be fully compatible with the Xilinx reVision stack.

Connectivity:

FM191-R; FMC-LPC to:

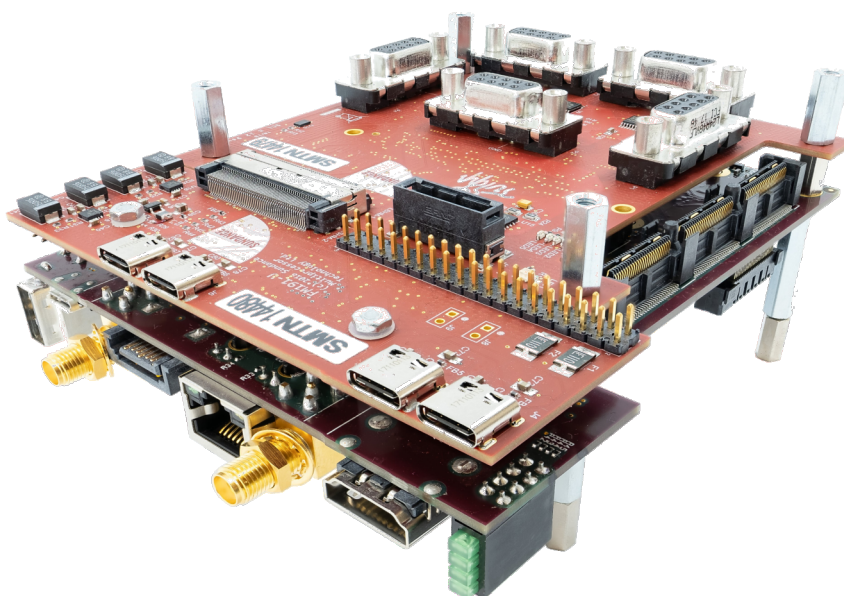
- 15x Digital I/Os [DB9]
- 12x Analogue Inputs [DB9]
- 8x Analogue Outputs [DB9]
- 1x Expansion [SEIC]

FM191-U; SEIC to:

- 4x USB3.0 [USB-C]
- 28x GPIO [40-pin GPIO]

FM191-A1; 40-pin GPIO

- 28x GPIO [DB9]



EMC² stackable ruggedised box.



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