

Application-Ready Embedded Platform  
Flexible and Cost-Optimized

# SimpleFlex Benefits



## /SIMPLEFLEX

### APPLICATION-READY EMBEDDED PLATFORM

SimpleFlex is the intelligent combination of a standard Computer-On-Module with a standard carrier board. It combines the advantages of **Standard SBC** and **Custom SBC** by choosing the COM from a huge portfolio of CPU and memory configuration.

This is the basis for innovative solutions in HMI systems, complex display systems, IoT gateways, professional infotainment systems, object recognition systems, transportation applications, medical devices, gaming systems and building automation, among others.

The ready-to-use platform is cost-efficiently adapted with the selected interfaces and assembled in-house at full-automatic production lines. For the customization, more than 30 pre-validated interface combinations are available. SimpleFlex is therefore best suited for series production with large quantities.

### FEATURES

- From idea to solution in no time
- Just selection and configuration, no development
- Standard cooling solutions
- Built-in versatility by many customization options
- ARM and x86 scalability = carrier assembly variants
- By design optimized for low production cost and simple customization
- Industrial temperature range from -40°C to +85°C

	Standard SBC	Custom SBC	SimpleFlex
Low cost	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓
Flexibility	--	✓ ✓	✓ ✓ ✓
Time to Market	✓ ✓ ✓	-- --	✓ ✓ ✓
Low Development cost/risk	✓ ✓ ✓	-- --	✓ ✓ ✓

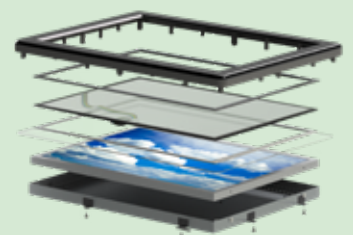
## /SIMPLEPLUS

### SELECTED COMBINATION WITH SIMPLEPLUS TOUCH DISPLAY SOLUTIONS

The embedded platform can be ideally combined with Avnet Integrated's SimplePlus platform, that provides a new agile approach to display customization by leveraging a range of off-the-shelf LCD and validated touch assemblies, making your first unit ready for delivery in less than 48 hours.

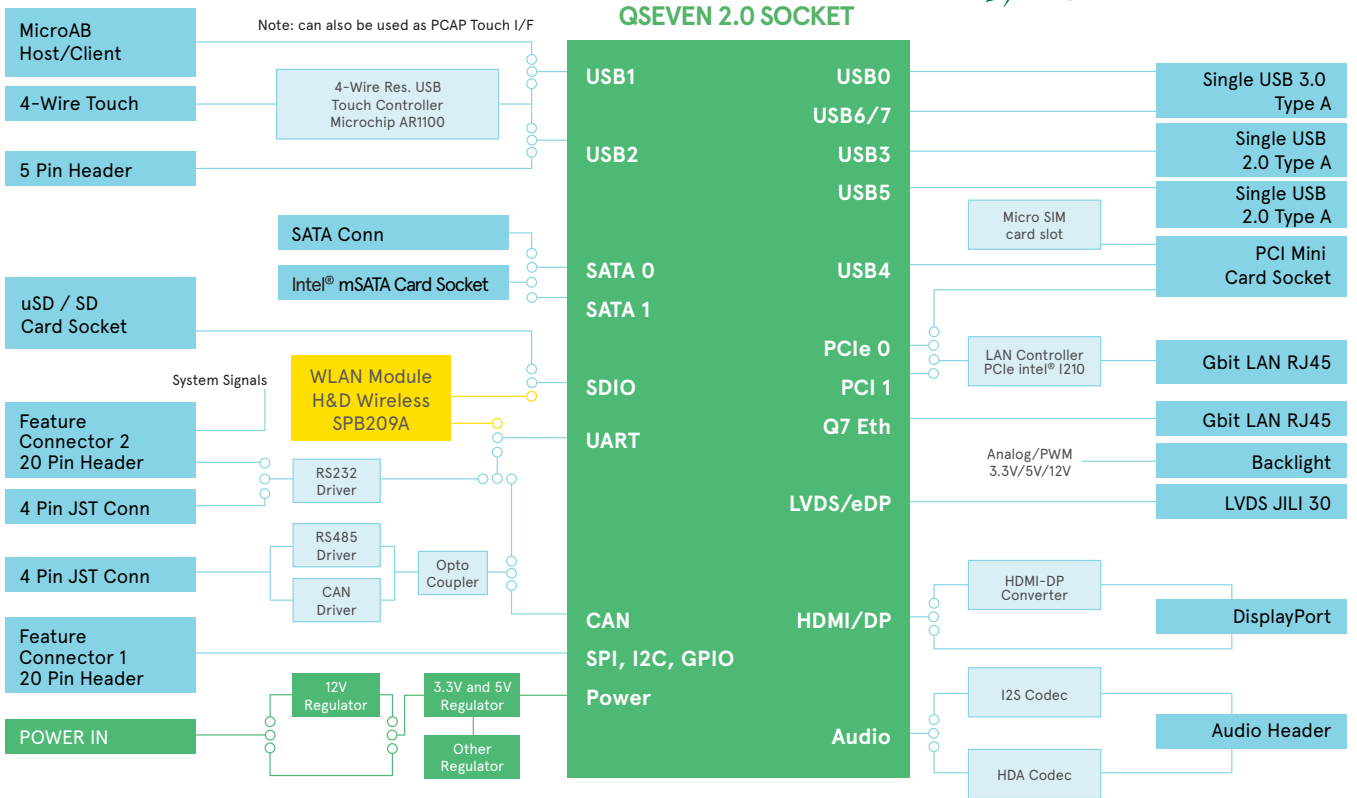
- Improve user experience with limitless design possibilities
- Cut time to market with our agile approach
- Reduce risk by leveraging proven designs

Together with your product and engineering teams, our expert touch and display engineers bring you ideas, insights and ultimately innovation.

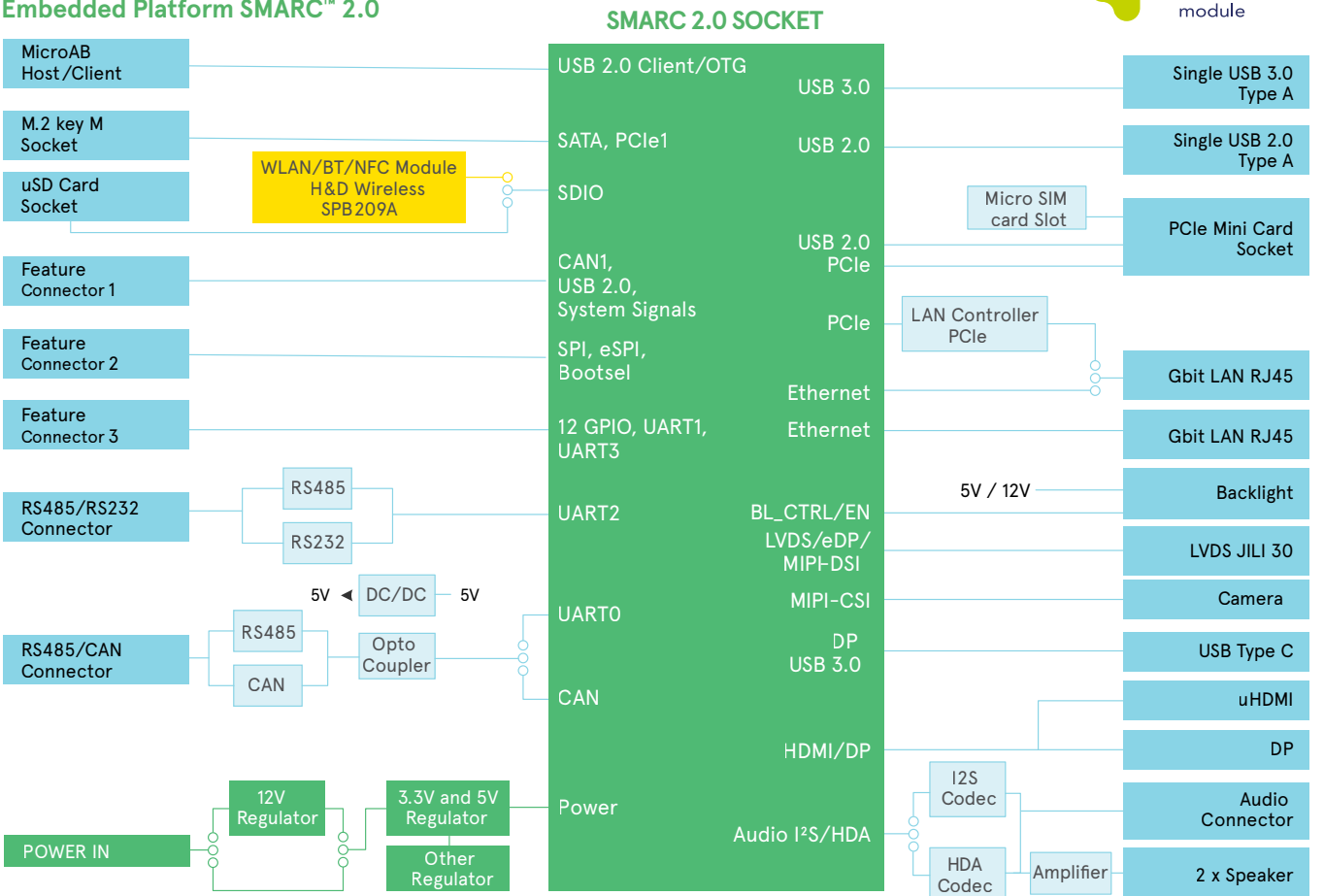


# Block Diagram

## MSC Q7-MB-EP5 Embedded Platform Qseven™ 2.0



## MSC SM2S-MB-EP5 Embedded Platform SMARC™ 2.0



# SERIAL PRODUCTION

NO DEVELOPMENT,  
JUST SELECTION AND  
CONFIGURATION



90 Days

DELIVERY

OPTIMIZED PRODUCT

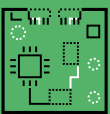
INTERFACE CONFIGURATION

48h

EVALUATION

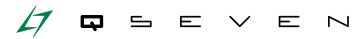
SELECTION COM & CARRIER


IDEA



# Ready Solution

## MSC Q7-MB-EP5 Embedded Platform Qseven™ 2.0



 148 x 102 mm


ARM

x86

- Up to 2x Gigabit Ethernet
- Up to 2x SATA-II
- Mini PCI Express, mSATA, SD/Micro-SD
- 1x USB 3.0, up to 3x USB 2.0
- 8 GPIO, Audio
- 1x USB 2.0 MicroAB Host/Client
- 1x UART, RS-232, RS-485
- 1x CAN (opt. galv. Isolated)
- DisplayPort /  $\mu$ HDMI, LVDS, eDP
- WLAN / Bluetooth NFC with antenna (option)
- Input voltage 10VDC to 36VDC

## MSC SM2S-MB-EP5 Embedded Platform SMARC™ 2.0



 146 x 80 mm

ARM

x86

- Up to 2x Gigabit Ethernet
- Mini PCI Express, M.2 key M, Micro-SD
- 2x USB 3.0, 3x USB 2.0,  
1x USB 2.0 MicroAB Host/Client
- 4x UART, RS-232, RS-485
- 2x CAN (opt. galv. Isolated)
- DisplayPort, LVDS, MIPI-DSI, eDP,  $\mu$ HDMI
- USB Type-C™ (with DisplayPort)
- Audio, opt. with 2x 2.5W Stereo Amplifier
- MIPI-CSI, 12 GPIO, SPI, I<sup>2</sup>C
- WLAN / Bluetooth  
NFC with antenna (option)
- Input voltage 10VDC to 36VDC

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