

	TQMxE40S	TQMxE40M	TQMxE40C1	TQMxE40C2
Form factor	SMARC 2.1	COM Express® Mini Type 10	COM Express® Compact Type 6	COM Express® Compact Type 6
Focus	Innovative, dynamic standard Low-profile/mobile applications	Conservative, consistent standard Robust solutions for harsh environmental conditions	Entry level for scalable COM Express® Type 6 platforms Especially robust (shock/vibration) due to soldered-down memory	Entry level for scalable COM Express® Type 6 platforms High flexibility in memory configuration through SODIMM
CPU type	PC-Like: Celeron N6211, J6413, Pentium N6415, J6426 Embedded: Atom x6211E, x6413E, x6425E Industrial: Atom x6212RE, x6414RE, x6425RE Atom x6200FE, x6427FE	PC-Like: Celeron N6211, J6413, Pentium N6415, J6426 Embedded: Atom x6211E, x6413E, x6425E Industrial: Atom x6212RE, x6414RE, x6425RE Atom x6200FE, x6427FE	PC-Like: Celeron N6211, J6413, Pentium N6415, J6426 Embedded: Atom x6211E, x6413E, x6425E Industrial: Atom x6212RE, x6414RE, x6425RE Atom x6200FE, x6427FE	PC-Like: Celeron N6211, J6413, Pentium N6415, J6426 Embedded: Atom x6211E, x6413E, x6425E Industrial: Atom x6212RE, x6414RE, x6425RE Atom x6200FE, x6427FE
Memory	LPDDR4/4x: 4, 8, 16 GB with IBECC eMMC: 8 ... 256 GB EEPROM: 32 kbit	LPDDR4/4x: 4, 8, 16 GB with IBECC eMMC: 8 ... 256 GB EEPROM: 32 kbit	LPDDR4/4x: 4, 8, 16 GB with IBECC eMMC: 8 ... 256 GB EEPROM: 32 kbit	DDR4 (2x SO-DIMM): up to 32 GB with IBECC eMMC: 8 ... 256 GB EEPROM: 32 kbit
Graphics	1x eDP or Dual-Channel LVDS 2x DP++ (DP/HDMI)	1x eDP or Single-Channel LVDS 1x DP++ (DP/HDMI)	1x eDP or Dual-Channel LVDS 2x DP++ (DP/HDMI)	1x eDP or Dual-Channel LVDS 2x DP++ (DP/HDMI)
Ethernet	2x Gb ETH with TSN support	1x Gb ETH with TSN support	1x Gb ETH with TSN support	1x Gb ETH with TSN support
USB	1x USB 3.2 Gen2 (10 Gb/s) 1x USB 3.2 Gen2 Dual-Role (10 Gb/s) 4x USB 2.0	1x USB 3.2 Gen2 (10 Gb/s) 1x USB 3.2 Gen2 Dual-Role (10 Gb/s) 8x USB 2.0	1x USB 3.2 Gen2 (10 Gb/s) 1x USB 3.2 Gen2 Dual-Role (10 Gb/s) 8x USB 2.0	1x USB 3.2 Gen2 (10 Gb/s) 1x USB 3.2 Gen2 Dual-Role (10 Gb/s) 8x USB 2.0
SATA	1x SATA Gen3 (6 Gb/s)	2x SATA Gen3 (6 Gb/s)	2x SATA Gen3 (6 Gb/s)	2x SATA Gen3 (6 Gb/s)
PCIe	4x PCIe Gen3 (8 Gb/s)	4x PCIe Gen3 (8 Gb/s)	8x PCIe Gen3 (8 Gb/s) (max 8 Lanes / 6 Root Ports)	8x PCIe Gen3 (8 Gb/s) (max 8 Lanes / 6 Root Ports)
CAN/UART	2x CAN 2x HS UART 2x Legacy UART	1x Legacy UART 1x CAN or Legacy UART	1x Legacy UART 1x CAN or Legacy UART	1x Legacy UART 1x CAN or Legacy UART
I2S/HDA	1x I2S 1x I2S or HDA (muxed)	1x HDA	1x HDA	1x HDA
eSPI/LPC	1x eSPI	1x eSPI or LPC	1x eSPI or LPC	1x eSPI or LPC
SPI	1x SPI for external UEFI BIOS flash	1x SPI for external UEFI BIOS flash	1x SPI for external UEFI BIOS flash	1x SPI for external UEFI BIOS flash
I2C/SMBus	4x I2C 1x SMBus	1x I2C 1x SMBus	1x I2C 1x SMBus	1x I2C 1x SMBus
SD Card/GPIO	1x SD Card 14x GPIO	1x SD Card or 8x GPIO	1x SD Card or 8x GPIO	1x SD Card or 8x GPIO
TPM	TPM 2.0 (option)	TPM 2.0 (option)	TPM 2.0 (option)	TPM 2.0 (option)
Supply voltage	4.75 ... 5.25 V	4.75 ... 20 V	4.75 ... 20 V	4.75 ... 20 V