# 7 Series Zynq-7000 based modules

| | TE | 0715 | - | 03 | - | x | x | x | x | x | x | - | x |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 2 | 3456 | 7 | 8 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |

**Module type**

| | |
|---|---|
| TE | BB Mezzanine Module |

Module name

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 0715 | 0716 | 0720 | 0722 | 0723 | 0724 | 0726 | 0727 | 0729 | 0745 |
| 0782 | 0783 | 0784 | | | | | | | |

**Module Revision**

| | |
|---|---|
| 01 | Revision 1 (initial) |

**Device name**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| *Z-7S* | *Z-12S* | *Z-14S* | *Z-10* | *Z-15* | *Z-20* | *Z-30* | *Z-35* | *Z-45* | *Z-100* | Zynq-7000 |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **A** | |

**Speed grade**

| | | | | | |
|---|---|---|---|---|---|
| *1* | *2* | *3* | *L1* | *L2* | Zynq-7000 |
| **1** | **2** | **3** | **4** | **5** | |

**Temp range (Tstr. abs. = -65 to +150°C )**

| **XC** (Standard-Grade) | | | **XA** (Automotive-Grade) | | **XQ** (Defense-Grade) | | |
|---|---|---|---|---|---|---|---|
| Commercial (0 /+85°C Tj) | Extended (0 /+100°C Tj) | Industrial (-40 /+100°C Tj) | I - Industrial (-40 /+100°C Tj) | Q - Expanded (-40 /+125°C Tj) | Extended (0 /+100°C Tj) | Industrial (-40 /+100°C Tj) | M - Military (-55 /+125°C Tj) |
| **C** | **E** | **I** | **T** | **Q** | **K** | **N** | **M** |

**DDR memory**

| | | | | | |
|---|---|---|---|---|---|
| **-** | *Not present* | | | | |
| **0** | *Not populated* | | | | |
| **1** | TE0720/TE0745: 1GByte | Industrial | 2 x 4Gbit - IM4G16D3FABG-125I (Obsolete) | | #27202 |
| **2** | | | | | |
| **3** | TE0715/TE0720/TE0727/TE0724/TE0745/TE0782/TE0784: 1GByte | Industrial | 2 x 4Gbit | IS43TR16256BL-125KBLI (DDR3L) | #29494 |
| | TE0783: 1GByte (PS), 2GByte (PL) | | 6 x 4Gbit | | |
| **4** | TE0720: 256MByte | Industrial | 2 x 1Gbit - IME1G16D3EEBG-15:EI (ECC) | | #27015 |
| **5** | TE0720: 256MByte | Industrial | 2 x 1Gbit - NT5CC64M16GP-DII (DDR3L) | | #27039 |
| **6** | TE0720/TE0723/TE0726/TE0729: 512MByte | Industrial | 1 x 4Gbit - IS43TR16256BL-125KBLI | | #29494 |
| **7** | TE0726:128MByte | Industrial | 1 x 1Gbit - NT5CC64M16GP-DII (DDR3L) | | #27039 |
| **8** | TE0720: 1GByte | Automotive | 2 x 4Gbit - IS46TR16256BL-125KBLA2 (DDR3L) | | #30927 |
| **9** | TE0726: 512MByte | Industrial | 1 x 4GBit - IS43TR16256ECL-125LB2LI (DDR3L ECC) | | #32030 |
| **X** | SODIMMSocket | | | | |

**Flash memory**

| | | | | |
|---|---|---|---|---|
| **0** | *Not populated* | | | |
| **1** | TE0745: 64 MByte | Industrial | 512Mbit - MT25QU512ABB8E12-0SIT (1.8V) | #29292 |
| **2** | TE0720/TE0724: 32 MByte | Industrial | 256Mbit - S25FL256SAGBHI20 (3.3V) | #25945 |
| **3** | TE0715/TE0720/TE0729/TE0782/TE0783: 32 MByte | Industrial | 256Mbit - S25FL256SAGBHI20 (3.3V) | #25945 |
| | exception: TE0724: 64 MByte | Extended | 512Mbit - IS25LP512M-RHLE (3.3V) | #30275 |
| **4** | TE0723/TE0726/TE0727: 16 MByte | Automotive | 128Mbit - S25FL127SABMFV10 (3.3V, SO8W) | #26078 |
| **5** | TE0729/0783: 32 MByte | Extended | 256Mbit - IS25LP256D-JHLE (3.3V) | #29170 |
| **6** | TE0720: 32 MByte | Automotive | 256Mbit - MT25QL256ABA8E12-0AUT | #30928 |
| **7** | TE0720: 32 MByte | Industrial | 256Mbit - MT25QL256ABA8E12-1SIT | #28856 |

**eMMC**

| | | | | |
|---|---|---|---|---|
| **-** | *Not present* | | | |
| **0** | *Not populated* | | | |
| **F** | TE0720: 8GByte | Industrial | 8GByte - IS21ES08G-JCLI | #29169 (EOL) |
| **G** | TE0720: 32GByte | Industrial | 32GByte - IS21ES32G-JCLI | #29880 (EOL) |
| **H** | TE0783: 64GByte | Industrial | 64GByte - IS21ES64G-JCLI | #29799 (EOL) |
| **K** | TE0720: 8GByte | Automotive | 8GByte - IS22ES08G-JCLA1 | #30926 (EOL) |
| **M** | TE0720: 8GByte | Industrial | 8GByte - SDINBDG4-8G-XI2 | #31133 |

| | | | | |
|---|---|---|---|---|
| **N** | TE0720: 32GByte | Industrial | 32GByte - SDINBDG4-32G-XI2 | #31139 |
| **P** | TE0720: 8GByte | Automotive | 8GByte - SDINBDG4-8G-XA | #32277 |

| **Other options (Connectors, custom options)** | |
|---|---|
| **A** | Standard assembly variant |
| **L** | Low profile |
| **...** | Custom assembly variant, look additional table below |

| **Additional options.** | |
|---|---|
| | no extra options |
| **S** | Starter Kit |
| **K** | With Heat spreader |
| **P** | Prototype |
| **Y** | RTC not assembled |
| **Z** | MUN12A instead of TPS82140 |
| **...** | Custom assembly variant, look additional table below |

Other assembly variations (position 17)

| Module | Variation | Description |
|---|---|---|
| TE0716 | A | Standard height assembly option |
| | N | Standard height assembly option (same as A), BOM partially supplied by customer |
| | M | Standard height assembly option (same as A), BOM partially supplied by customer |
| TE0720 | A | Standard height assembly option |
| | L | Low profile assembly option |
| | M | Custom assembly option: Standard height, no Ethernet, USB, RTC, VBAT, CryptoKey |
| TE0722 | B | Standard assembly variant, diode D4 and SD socket J8 is not populated |
| | D | Standard assembly variant, SD socket J8 is not populated |
| TE0724 | A | Standard height assembly option |
| TE0726 | A | Standard height assembly option |
| | Q | Custom assembly option: Standard height, no USB, DSI LCD Con., 3.5RCA |
| | R | Custom assembly option: Standard height, no USB, DSI LCD Con., 3.5RCA, HDMI, CSI Cam Con. |
| TE0727 | A | Standard height assembly option |
| TE0729 | A | Standard height assembly option |
| | M | Standard height, Ethernet Phys not assembled |
| TE0745 | A | Standard height assembly option |
| | B | Standard height assembly option, black solder mask |
| | F | Standard height option, FPGA - FFG676 package |
| TE0782 | A | Standard height assembly option |
| | H | Standard height assembly option with two Hyperflash |
| | | |

Other assembly variations (position 18)

| Module | Variation | Description |
|---|---|---|
| TE0715 | N | Coated (Coating 3M NOVEC EGC-1700) |
| TE0720 | S | Starter kit |
| | N | Coated (Coating 3M NOVEC EGC-1700) |
| | B | BOM partially supplied by customer |
| | D | Custom CPLD Design |
| | E | Custom KK 27430 |
| | F | Custom KK 30570 |
| TE0729 | S | Starter kit |
| TE0745 | K | Heat spreader assembled |
| | N | Coated (Coating 3M NOVEC EGC-1700) |