



## ABOUT

**SGET e.V. is a technical and scientific association with its registered office in Munich. The purpose of the Association is to generate and to promote technical specifications or other work results such as implementation guidelines, software interfaces or system requirements.**



The **SMARC** („Smart Mobility ARChitecture“) is a versatile small form factor computer Module definition targeting applications that require low power, low costs, and high performance.



The Modules will typically use ARM SOCs similar or the same as those used in many familiar devices such as tablet computers and smart phones. Alternative low power SOCs and CPUs, such as tablet oriented X86 devices and other RISC CPUs may be used as well. The Module power envelope is typically under 6W.

Two Module sizes are defined: 82mm x 50mm and 82mm x 80mm. The Module PCBs have 314 edge fingers that mate with a low profile 314 pin 0.5mm pitch right angle connector (the connector is sometimes identified as a 321 pin connector, but 7 pins are lost to the key).



The **Qseven** concept is an off-the shelf, multi vendor, Computer-On-Module that integrates all the core components of a common PC and is mounted onto an application specific carrier board.



Qseven modules have a standardized form factor of 70mm x 70mm or 40mm x 70mm and have specified pinouts based on the high speed MXM system connector that has a standardized pinout regardless of the vendor. The Qseven module provides the functional requirements for an embedded application. These functions include, but are not limited to, graphics, sound, mass storage, network and multiple USB ports. A single ruggedized MXM connector provides the carrier board interface to carry all the I/O signals to and from the Qseven module. This MXM connector is a well known and proven high speed signal interface connector that is commonly used for high speed PCI Express graphics cards in notebooks.

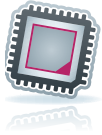
How to join us?



## Product Overview

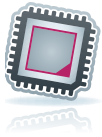


### Intel Atom



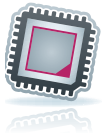
Product	Features	Manufacturer
uCOM-BT	SMARC® with Intel® Atom™ SoC	AAEON Technology, Inc.
LEC-BT	SMARC® Full Size Module with Intel® Atom™ Processor E3800 Series System-on-Chip	ADLINK Technology, Inc.
LEC-BTS	SMARC® Short Size Module with Intel® Atom™ Processor E3800 Series System-on-Chip	ADLINK Technology, Inc.
SMARC-sxBTi	SMARC® module with Intel® Atom™ processor E3800 series with extremely low-profile and high graphics performance	Kontron

### Freescal e i.MX



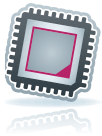
Product	Features	Manufacturer
LEC-iMX6	SMARC® Short Size Module with Freescal e i.MX6 Solo, DualLite, Dual or Quad Processor	ADLINK Technology, Inc.
ROM-5420	SMARC® Module based on Freescal e ARM Cortex-A9 i.MX6	Advantech
SMA-iMX6	Freescal e i.MX 6 ARM Cortex-A9 RISC Module	Avalue Technology Inc.
SCM120	SMARC® Platform with Freescal e ARM Cortex-A9 i.MX6	Axiomtek
RM-F600-SMC	SMARC® solution by Freescal e Solo/Dual/DL/Quad CPUs	IBASE Technology Inc.
SMARC-sAMX6i	SMARC® based on Freescal e i.MX6 up to quad core	Kontron
MAGIK2 Module Family	i.MX6 Based SMARC® Module	TES Electronic Solutions GmbH

### NVIDIA TEGRA



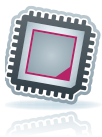
Product	Features	Manufacturer
SMARC-sAT30	SMARC® based on Nvidia® Tegra® 3	Kontron

### TI Sitara



Product	Features	Manufacturer
LEC-3517	SMARC® Short Size Module with TI Sitara AM3517 Cortex-A8 Processor	ADLINK Technology, Inc.
SMARC-sA3874i	SMARC® based on Texas Instruments AM3874 up to 800MHz	Kontron

### Vortex

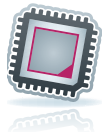


Product	Features	Manufacturer
SMARCBoard EX	SubAtom x86 SMARC® module	b-plus GmbH

# Product Overview

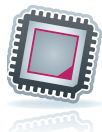


## AMD G Series



Product	Features	Manufacturer
EMQ-a50M1	AMD Fusion G-T40E Qseven® CPU Module	ARBOR Technology Corp.
QSM-520E	Wide-Range Operating Temperature AMD Fusion G-T40E Qseven® CPU Module	ARBOR Technology Corp.
EQM-A50M	AMD G-Series Qseven® Module with AMD A50M Chipset	Avalue Technology Inc.
conga-QAF	Based on AMD Embedded G-Series Processors	congatec AG
conga-QG	Qseven® module based on the high-performance, low-power AMD Embedded G-Series SOC platform	congatec AG
H6059	AMD G-series APU T16R/T40R/T40E	Hectronic
MSC Q7-A50M	AMD Embedded G-Series	MSC Vertriebs GmbH
Q7-GX	Qseven® Rel. 2.0 Compliant Module with the AMD Embedded G-Series System-on-Chip	SECO srl
QuadMo747-GSeries	Computer on Module with the new AMD Embedded G-Series Platform	SECO srl

## Altera



Product	Features	Manufacturer
iW-RainboW-G17M-Q7	Cyclone V SoC Qseven® Module	iWave Systems Technologies Pvt. Ltd.

## Freescal e i.MX

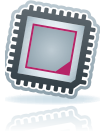


Product	Features	Manufacturer
AQ7-IMX6	Qseven® CPU Module with Onboard Freescal e™ i.MX6 Solo/Dual/Quad ARM Cortex A9 Processor	AAEON Technology, Inc.
ROM-7420	Freescal e ARM Cortex-A9 i.MX6 Qseven Module	Advantech
conga-QMX6	Quad-core ARM module	congatec AG
eDM-QMX6	Qseven® ARM Module Quad-core	Data Modul AG
FS700	Qseven® Based on Freescal e™ i.MX6	DFI Inc.
i.CORE RQS M6	uQ7 CPU module based on Freescal e™ i.MX6 single, dual light, dual or quad core	Engicam s.r.l.
QBlissA9	Qseven® module with Freescal e™ i.MX 6 CPU	F & S Elektronik Systeme GmbH
iW-RainboW-G15M-Q7	i.MX6 Qseven® SOM	iWave Systems Technologies Pvt. Ltd.
iW-RainboW-G8M-Q7	i.MX51 Qseven® SOM	iWave Systems Technologies Pvt. Ltd.
MSC Q7-IMX6	Qseven® Rev. 1.2 / 2.0 compatible Module with Freescal e™ i.MX6 Solo/Dual/Quad Processor	MSC Vertriebs GmbH
µQ7-i.MX6	µQseven Rel. 2.0 Compliant Module with Freescal e™ i.MX6 Processor	SECO srl
QuadMo747-X/i.MX6	Computer on Module with Freescal e™ i.MX6 Processor	SECO srl

# Product Overview

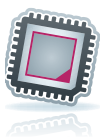


## Intel Atom



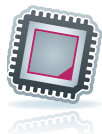
Product	Features	Manufacturer
AQ7-LN	Qseven® CPU Module with Onboard Intel® Atom™ N450/N455 Processor	AAEON Technology, Inc.
Q7-BT	Qseven® Standard Size Module with Intel® Atom™ Processor E3800 Series System-on-Chip	ADLINK Technology, Inc.
SOM-3565	Intel® Atom™ Processor N2600 Qseven CPU Module	Advantech
EmQ-i2506	Intel® Atom™ N2600 Qseven® CPU Module	ARBOR Technology Corp.
EmQ-i2301	Intel® Atom™ Processor E3800 family Qseven® CPU Module	ARBOR Technology Corp.
EQM-CDV	Intel® Cedarview Qseven® Module with Intel® NM10 Express Chipset	Avalue Technology Inc.
EQM-BYT	Intel® Atom™ SoC Processor E3800 Product Family	Avalue Technology Inc.
conga-QA6	Low Power Qseven® Module with Enhanced Graphics	congatec AG
conga-QA	Low Power Qseven® Module	congatec AG
conga-QA3	Low Power Qseven® Module with Industrial Temperature Range	congatec AG
BT700	Qseven® Based on Intel® Atom™ Processor E3800	DFI Inc.
QB702-B	Qseven® Based on Intel® Atom™ Processor E600	DFI Inc.
QB701-B	Qseven® Based on Intel® Atom™ Processor E600	DFI Inc.
QB700-B	Qseven® Based on Intel® Atom™ Processor E600	DFI Inc.
BT701	Qseven® Based on Intel® Atom™ Processor E3800	DFI Inc.
H6055	Intel® Atom™ E620T/E640T/E680T	Hectronic
H6049	Intel® Atom™ Z510/Z530	Hectronic
iQ7-US15W	Qseven® CPU module with Intel® Atom™ processor Z510/530	IEI Integration Corp.
iW-RainboW-G6M-Q7	Atom™ Z5xx Qseven® SOM	iWave Systems Technologies Pvt. Ltd.
MSC Q7-TCTC-FD	Intel® Atom™ E6x0, extended Temperature - Low-Power Atom technology for industrial temperature applications	MSC Vertriebs GmbH
MSC Q7-US15W-FD	Intel® Atom™ Z5x0 Flash	MSC Vertriebs GmbH
MSC Q7-US15W	Intel® Atom™ Z5x0	MSC Vertriebs GmbH
MSC Q7-BT	Qseven® Rev. 2.0 compatible Module with Intel® Atom™ E38xx Solo/ Dual/Quad Processor	MSC Vertriebs GmbH
QuadMo747-EXTREME	Computer on Module with Intel® Atom™ Z5xxPT series – US15WPT Chipset, specifically designed for industrial temperature range	SECO srl
QuadMo747-E6xx	Qseven® Rel. 1.20 Compliant Module with Intel® Atom™ E6xx series CPU + EG20T Chipset	SECO srl
QuadMo747-Z5xx	Computer on Module with Intel® Atom™ Z5xx series – US15W Chipset	SECO srl
QuadMo747-x2000	Qseven® Rel. 2.0 Compliant Module with Intel® Atom™ Cedar View family Processors and Intel® NM10 Express Chipset	SECO srl
QuadMo747-E6xx-EXTREME	Certified Industrial temperature range Qseven® Rel. 1.20 Compliant Module with Intel® Atom™ E6xxT series CPU + EG20T Chipset	SECO srl
Q7-BT	Qseven® Rel. 2.0 Compliant Module with the Intel® Atom™ E3800 family (Bay Trail) System-on-Chip	SECO srl

## Marvell



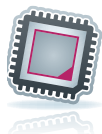
Product	Features	Manufacturer
Marvell 88AP510 Qseven® module	Qseven® 2.0 Compliant Module with 1.0 GHz Soc with Integrated ARM CPU and Graphics Processor	Pactron
Marvell PXA2128 Qseven® module	Qseven® 2.0 Compliant Module with Integrated Dual Core 1.2 GHz ARM CPU and Graphics Processor	Pactron
Marvell 88F6282 Qseven® module	Qseven® 2.0 Compliant Module with 2.0 GHz High Performance ARM CPU	Pactron

## NVIDIA TEGRA



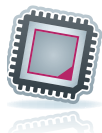
Product	Features	Manufacturer
MSC Q7-NT2	NVIDIA™ Tegra 290	MSC Vertriebs GmbH
QuadMo747-X/T30	Computer on Module with NVIDIA® Tegra® T30 Processor	SECO srl
µQ7-T30	µQseven Rel. 2.0 Compliant Module with NVIDIA® Tegra® T30 Processor	SECO srl

## TI OMAP



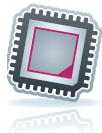
Product	Features	Manufacturer
MSC Q7-TI8168	TI DM8168	MSC Vertriebs GmbH
QuadMo747-X/OMAP3	Computer on Module based on the Texas Instruments® OMAP™ 37xx Family	SECO srl

## TI SITARA



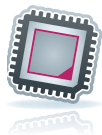
Product	Features	Manufacturer
iW-RainboW-G12M-Q7	AM389x/DM816x Qseven® Module	iWave Systems Technologies Pvt. Ltd.

## VIA Nano



Product	Features	Manufacturer
EmQ-v900	VIA Nano™ Qseven® CPU Module	ARBOR Technology Corp.

## Vortex



Product	Features	Manufacturer
QBoard DX2	SubAtom x86 QSeven® module	b-plus GmbH
µQBoard EX	SubAtom x86 QSeven® module	b-plus GmbH



**Members:**



**2 Standards:**



SGET e.V. is a technical and scientific association with its registered office in Munich. The purpose of the Association is to generate and to promote technical specifications or other work results such as implementation guidelines, software interfaces or system requirements.

How to join us?

