

Get Started with **AAEON COM Express Modules**

Realize Your Design with AAEON's Q Service Plus









AAEON'S Q Service Plus



Q Service Plus is AAEON's unique set of multi-faceted services aimed at getting you up and running in the shortest possible time. We provide:

- Quick BIOS setup within 5 working days
- Preliminary troubleshooting feedback within 1~2 working days
- Complete compatibility, reliability and debugging within 3~5 working days
- On-site service and consultation, including resolution and risk management

More than Design and Support

With Q Service Plus, AAEON assures that any of our products will be timely and adequately supported by our team of experienced engineers, providing services, such as designing, debugging and circuitry review.

For circuitry review, initial feedback will be provided after the first 2 days with a complete assessment after 5 days. Debugging will be performed on the customer's equipment and initial feedback will be available within 72 hours. Similarly, the setup of BIOS will be completed within 5 working days.

Q service is our commitment to you. Please contact **Qservice@aaeon.com.tw** to learn more.



Technical Forum

Created for further support to our customers in design, diagostic, fine-tuning and most important - share experiences. AAEON engineers will regularly post technical related articles about the technologies and circuitry design. As a forum open to our customers, it also allows customers to post and discuss technical topics with engineers directly. Our R&D staff will be more than happy to reply and interact with you.

Forum News Link.

http://www.aaeon.com/tw/n/press-release-aaeon-technical-forum/

Forum Link:

http://forum.aaeon.com/







Selection Guide



Form Factor	COM Express Type 6 - Basic
Processor	Onboard 6th Generation Intel® Core™ and Celeron™ Processor, H-series
Memory Type	DDR4, SO-DIMM x 2, ECC support (optional)
Max. Memory Capacity	32 GB
Ethernet	Intel® I219, 10/100/1000Base-TX
Video Output	Up To 2 DDI, LVDS/eDP, VGA, PEG x 1
Audio	High definition audio
USB Port	USB 2.0 x 8, USB 3.0 x 4
Serial Port	TX/RX x 2
Storage	SATA 3Gpbs x 4
Expansion Slot	PCI-Express [x16] x 1, PCI-Express [1] x 8, LPC bus x1, SMBus x 1
Power Requirement	+12V
Dimension (L x W)	4.92" x 3.75" (125mm x 95mm)
Operating Temperature	32 °F ~ 140 °F (0 °C ~ 60 °C)

NANOCOM-BT



Form Factor	COM Express Type 10 - Mini
Processor	Intel® Atom™/Celeron® SOC Processor (M/I)
Memory Type	Onboard 2 GB DDR3L
Max. Memory Capacity	2 GB, option for 4GB
Ethernet	Intel® I210IT/I211AT, 10/1000/1000Base-TX
Video Output	LVDS LCD/eDP, DDI x 1
Audio	High definition audio
USB Port	USB 2.0 x 7, USB3.0 x1
Serial Port	TX/TR X 2
Storage	SATA 3Gbps x 2, onboard eMMC (optional)
Expansion Slot	PCI Express [x1] x 3, LPC Bus x 1, SMbus x 1
Power Requirement	Standard: +12V, Optional: +5V
Dimension (L x W)	3.31" x 2.17" (84mm x 55mm)
Operating Temperature	32 °F ~ 140 °F (0 °C ~ 60 °C),
	-40 °F ~ 185 °F (-40 °C ~ 80 °C) by E3845/E3825

μCOM-BT



Form Factor	SMARC Rev. 1.1
Processor	Intel® Atom™ SOC Processor
Memory Type	Onboard 2GB DDR3L
Max. Memory Capacity	2 GB, option for 4GB
Ethernet	Intel® I210IT/I211AT, 10/1000/1000Base-TX
Video Output	24-bit LVDS LCD/eDP, HDMI
Audio	HD Audio x 1
USB Port	USB3.0 x 1, USB2.0 x 2
Serial Port	UART x 2 (1 for TX/RX/RTS#/ CTS#; 1 for TX/RX)
Storage	SATA 3Gbps x 2, onboard eMMC (optional)
Expansion Slot	PCI Express [x1] x 3, I2C, SMBus, SPI
Power Requirement	Standard: +5V, Option: +3.3V
Dimension (L x W)	3.23" x 1.96" (82 mm x 50 mm)
Operating Temperature	32 °F ~ 140 °F (0 °C ~ 60 °C)

Selection Guide

COM-SKUC6



Form Factor	COM Express Type 6 - Compact
Processor	Onboard 6th Generation Intel® Core™ and Celeron™ Processor, U-series
Memory Type	DDR3L, SO-DIMM x1, non-ECC
Max. Memory Capacity	8 GB
Ethernet	Intel® I219, 10/100/1000Base-TX
Video Output	up to 2 DDI, LVDS/eDP, VGA
Audio	High definition audio
USB Port	USB 2.0 x 8, USB 3.0 x 4
Serial Port	TX/RX x 2
Storage	SATA 3Gbps x 3
Expansion Slot	PCI-Express [x1] x 8, LPC bus x 1, SMBus x 1
Power Requirement	+12V
Dimension (L x W)	3.74" x 3.75" (95mm x 95mm)
Operating Temperature	32 °F ~ 140 °F (0 °C ~ 60 °C),
	-40 °F \sim 185 °F (-40°C \sim 85°C) for WiTAS 2

COM-BYTC2



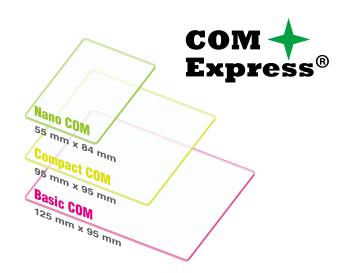
Form Factor	COM Express Type 2 - Compact
Processor	Intel® Atom™ / Celeron SOC Processor (M/I)
Memory Type	DDR3L Memory Socket x1
Max. Memory Capacity	8 GB DDR3L 1066
Ethernet	Intel® I210IT, 10/1000/1000Base-TX
Video Output	LVDS LCD/eDP, VGA
Audio	High definition audio
USB Port	USB 2.0 x7
Serial Port	Tx/Rx x2
Storage	SATA x 1. PATA x 1
Expansion Slot	PCI Express [x1] x 2, PCI x 1
Power Requirement	+12V
Dimension (L x W)	3.74" x 3.75" (95mm x 95mm)
Operating Temperature	32 °F ~ 140 °F (0 °C ~ 60 °C)
·	· · · · · · · · · · · · · · · · · · ·

AQ7-BT



Form Factor	Qseven Rev. 2.0
Processor	Intel® Atom™ SOC Processor
Memory Type	Onboard 2 GB DDR3L
Max. Memory Capacity	2 GB (4 GB Optional)
Ethernet	Intel® I210IT/I211AT, 10/1000/1000Base-TX
Video Output	24-bit LVDS LCD, DP x 1
Audio	High definition audio
USB Port	USB 2.0 x 6, USB3.0 x 1
Serial Port	4-Wire UART x 1
Storage	SATA x2, 1 share with onboard SSD
Expansion Slot	PCI Express [x1] x 3, LPC Bus x1 (shared with GPIO), SMbus x 2
Power Requirement	+5V
Dimension (L x W)	2.75" x 2.75" (70mm x 70mm)
Operating Temperature	32 °F ~ 140 °F (0 °C ~ 60 °C),
	-40 °F \sim 185 °F (-40 °C \sim 80 °C) by E3825

COM Products Across Form Factors





AAEON Thermal Solution

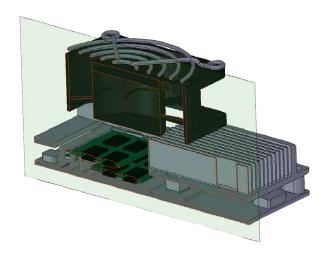
AAEON offers a full range of custom-designed thermal solutions to ensure optimal, flexible thermal management for your AAEON products.

With AAEON's custom thermal solution, you can be assured of the following services:

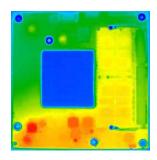
- Sample drawing of proposed designs
- Simulation of selected designs
- Field Testing before final implementation

Among these solutions is the heat sink-compatible COM Express module - achievable through creating a extra screw holes on the PCB - that ship with a secured thermal solution with an onboard fan connector to reduce assembly time.

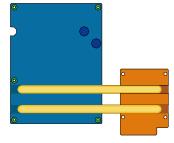
3D Drawing for Virtual Mechanical Checking



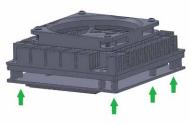
Thermal Simulation



Thermal Design



Ships in One Piece



Screw in from bottom



Carrier Starter Kit

As further support to our customers, AAEON offers a comprehensive set of testing platforms for COM Express, Qseven and SMARC. Other small cards, such as debug port cards for determining system faults and Super I/O cards for testing legacy I/Os are also available. Please contact our Qservice team for more details on the debugging tools at: Qservice@aaeon.com.tw.

2-1 Row Converter

Convert Type 2/6 to Type 1/10



Riser Card

PCle[x4] to PCle[x1] x 4 Conver on the PCle[x4] to 4 PCle[x1] slots



Debug Tool: SIO Card

Supports either Winbond 83627 or Fintek 81866 to test legacy ports



Debug Tool: LPC Debug

To show system's boot status



Cooler



Heat Spreader



Debug Tool: LPC & VGA Adapter Card

Brings out VGA and LPC for debugging purposes



AAEON Headquarters

AAEON Technology Inc.

5F, No. 135, Lane 235, Pao Chiao Rd., Hsin-Tien Dist, New Taipei City, 231, Taiwan, R.O.C. Tel: +886-2-8919-1234 Fax: +886-2-8919-1056 E-mail: sales@aaeon.com.tw URL: http://www.aaeon.com

LITERATURE ORDERING

Contact local office for literature requests.

Worldwide Offices

Americas

USA

California Office

324 W. Blueridge Ave, Orange, CA 92865, USA

+1-877-T0-AAEON (1-877-862-2366) Toll Free:

+1-714-996-1811 Fax: E-mail: sales@aaeon.com Tech Support: tech@aaeon.com

New Jersey Office

11 Crown Plaza, Hazlet, NJ 07730-2441, USA

Toll Free: +1-888-AAEON-US (1-888-223-6687) +1-732-203-9300 +1-732-203-9311

sales@aaeon.com Tech Support: tech@aaeon.com

Europe

Netherlands **AAEON EUROPE**

Ekkersrijt 4002, 5692 DA SON, The Netherlands

+31(0)499-745200 +31(0)499-462010 sales@aaeon.eu

Germany

AAEON Technology GmbH

An der Trift 65d, D-63303 Dreieich, Germany

+49(0)61033 74 79 00 Tel: +49(0)61033 74 79 49 sales@aaeon.eu

France

AAEON France Office

37-39 Avenue LEDRU-ROLLIN 75012 PARIS. France

+33 1 56 95 16 00 sales@aaeon.eu

Asia

Japan

Japan Branch Office

408B West Wing, KSP, 3-2-1, Sakado, Takatsu-ku, Kawasaki City , Kanagawa 213-0012 Japan

044-712-4122 Tel: 044-712-4123 jaychang@aaeon.com.tw

Singapore

AAEON Technology Singapore PTE LTD.

57 Genting Lane, #07-00, Singapore 349564

+65-6749-8749 +65-6746-1595 E-mail: sales@aaeon.com.sg

Asia

China

Shanghai Branch Office

20F, Unit D, GEM Building, No.487 Tianlin Road,

Xuhui District, Shanghai, China Tel: +86-21-3367-5511

+86-21-3367-4238 sales@aaeon.com.cn

Beijing Branch Office

Room 606-608 Block D, Jiahua Building, No.9, Shangdi 3rd Street, Haidian District, Beijing, China

Tel: +86-10-8278-0904 +86-10-8278-0214 E-mail: sales@aaeon.com.cn

Asia China

Shenzhen Branch Office

Room 1204, Jinmin Building, 6 Zizhu Road,

Zhuzilin Futian District, Shenzhen, China

+86-755-8304-7277 +86-755-8304-7272 Fax: E-mail sales@aaeon.com.cn

Wuhan Branch Office

B1501, 111 Guangu time Spuare Guanshan st.

Wuhan Hubei Province, China TEL: +86-27-87606090 Email: sales@aaeon.com.cn

Chengdu Branch Office

Room 2204, 22F, Building 6, No.666, JinCheng Avenue, GaoXin District, Chenadu City, China

TEL: +86-13312951135 Ivvli@aaeon.com.cn

AAEON Technology (Su Zhou) Inc.

Room 12, 2F, Building B, No.5 Xing Han Street, Suzhou Industrial Park, Jiang Su Province, China

+86-512-6762-5700 Fax: +86-512-6761-7337 sales@aaeon.com.cr



























