

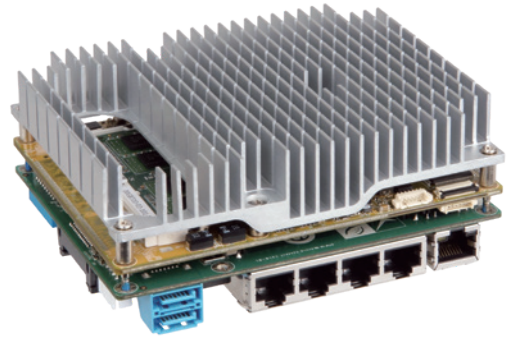
IEI Computer on Modules

A computer-on-module (COM) is a type of single-board computer (SBC), a subtype of an embedded computer system. An extension of the concept of system on chip (SoC) and system in package (SiP), COM lies between a full-up computer and a microcontroller in nature.

Design

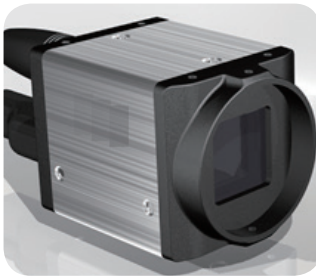
Computer-on-modules are complete embedded computers built on a single circuit board. The design is centered on a CPU or a microprocessor with RAM, input/output controllers and all other features needed to be a functional computer on the one board. However, unlike a single-board computer, the Computer-on-module will usually lack the standard connectors for any input/output peripherals to be attached directly to the board. The module will usually need to be mounted on a carrier board (or baseboard) which breaks the bus out to standard peripheral connectors. Some Computer-on-modules also include peripheral connectors and/or can be used without a carrier.

A Computer-on-module solution offers a dense package computer system for use in small or specialized applications requiring low power consumption or small physical size as is needed in embedded systems.



Typical Applications

High Density



Smart Camera



Speed Camera



Mobile Device

Automation & Robot Controller



Robot Controller



CNC

IEI Computer on Module Form Factors



COM Express Type 10

Mini: 84 mm x 55 mm



COM Express Type 6

Compact: 95 mm x 95 mm



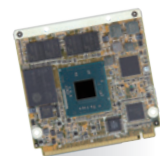
COM Express Type 6

Basic: 125 mm x 95 mm



COM Express Type 7

Basic: 125 mm x 95 mm



Qseven 2.0

70 mm x 70 mm