

**PRODUCT BRIEF:**

Logic :: Freescale

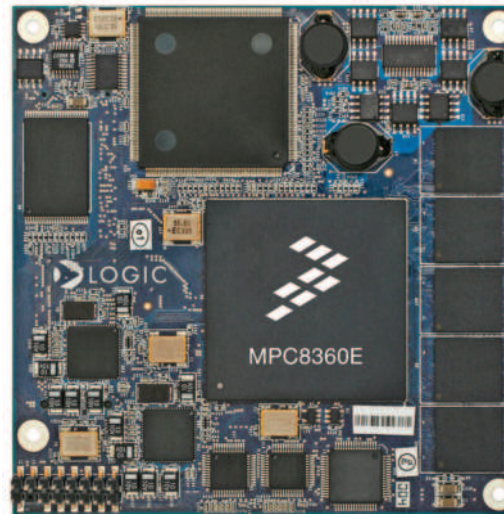
## MPC8360 COM Express System on Module

**The MPC8360 COM Express System on Module (SOM) is a compact, product-ready hardware and software solution that fast forwards embedded designs.**

The MPC8360 SOM adheres to the COM Express Compact form factor and is based on the Type III pin-out specification. This combination offers the essential features for industrial, networking, and medical applications. Using a SOM allows engineers to design a custom baseboard that meets their specific needs and is compatible with other Logic SOMs. This compatibility makes it easy for developers to upgrade their product for greater functionality and performance—while still using their original baseboard design.

By starting with the corresponding Zoom™ PowerQUICC™ Development Kit, developers can write application software on the same hardware that will be used in the final product.

The MPC8360 PowerQUICC™ processor from Freescale Semiconductor provides both control and communications processing in a single chip, making it a cost-effective solution for any product requiring deterministic industrial networking protocols.



**MPC8360 COM Express SOM**

Designing a product around Logic's SOM allows developers to easily combine their core technologies with the high performance of the MPC8360 PowerQUICC™ processor.

**MPC8360 COM EXPRESS :: HIGHLIGHTS:**

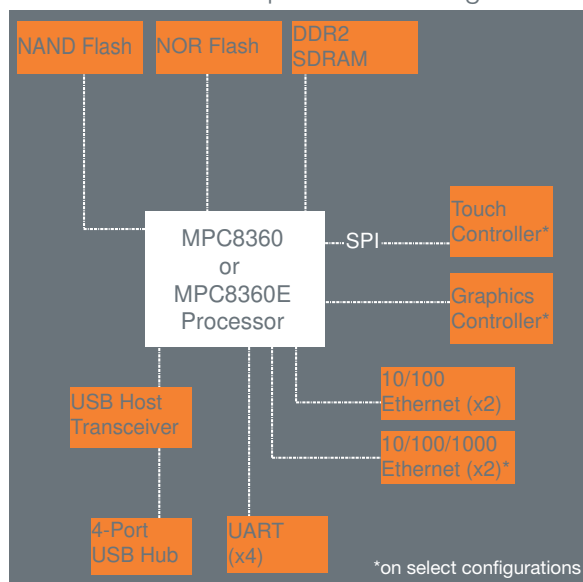
- + Product-ready SOM with the Freescale PowerQUICC™ MPC8360 processor running at 400 MHz or MPC8360E processor running at 667 MHz
- + COM Express Compact form factor 95 mm x 95 mm x 14.5 mm
- + Long product life-cycle
- + U-Boot bootloader installed in flash
- + Linux Board Support Packages (BSPs)
- + 0 °C to 70 °C (commercial temp) or -40 °C to 85 °C (industrial temp)
- + RoHS compliant

**ZOOM™ PowerQUICC™ KIT :: FEATURES:**

- + Application baseboard
- + MPC8360 COM Express SOM (COMMPC8360E-10-2752FCR)
- + Production-ready QUICCEngine™ micro-code for PROFIBUS, IEEE(R) 1588, and Ethernet PowerLink available from third-parties
- + Necessary accessories to immediately get up and running
- + Kit available from Freescale (MPC8360E-RDK)
- + See Zoom™ PowerQUICC™ Development Kit product brief for more information



## MPC8360 COM Express Block Diagram



## MPC8360 COM Express Ordering Information

| Model Number           | Speed (MHz) | SDRAM (MB) | NAND Flash (MB) | NOR Flash (MB) | Graphics/Touch | Ethernet    | Temperature   |
|------------------------|-------------|------------|-----------------|----------------|----------------|-------------|---------------|
| COMMPC8360-10-1652LCR  | 400         | 128        | 64              | 8              | N              | 10/100      | 0 °C to 70 °C |
| COMMPC8360E-10-2752FCR | 667         | 256        | 64              | 8              | Y              | 10/100/1000 | 0 °C to 70 °C |

+ Contact Logic for availability of industrial temp configurations.

## ZOOM™ PowerQUICC™ Development Kit Ordering Information

| Model Number | COM Express Configuration | Recommended Resale |
|--------------|---------------------------|--------------------|
| MPC8360E-RDK | COMMPC8360E-10-2752FCR    | \$999              |

### LOGIC WEBSITE :: DESIGN RESOURCES:

- + Logic Technical Support : <http://www.logicpd.com/support/>
- + Technical Discussion Group : <http://www.logicpd.com/support/tdg/>
- + Frequently Asked Questions (FAQ) : <http://www.logicpd.com/support/faq/>
- + For more information contact Logic Sales : [product.sales@logicpd.com](mailto:product.sales@logicpd.com)



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## Product Features

### Processor

- + Freescale PowerQUICC™ MPC8360 processor running at 400 MHz or MPC8360E processor running at 667 MHz

### SDRAM Memory

- + DDR2; 128, 256, 512 MB, or 1 GB
- + ECC support

### Flash Memory

- + NOR flash; 8 or 16 MB (8 MB standard)
- + NAND flash; 64 or 128 MB (64 MB standard)

### Display

- + Programmable color graphics controller (Fujitsu MB86277)
- + Built-in driver supports up to 1024 x 768 with LVDS interface
- + LVDS can be converted to 18-bit LCD on baseboard

### Touch Screen

- + Integrated 4-wire touch screen controller

### Network Support

- + Two 10/100 Base-T Ethernet controllers for application/debug
- + Two 10/100/1000 Base-T Ethernet controllers for application/debug

### PC Card Expansion

- + 32-bit PCI connection

### USB

- + Four USB 2.0 full-speed host interfaces

### Serial Ports

- + Four 16C550 compatible UARTs

### GPIO

- + Programmable I/O depending on peripheral requirements

### Software

- + U-Boot bootloader
- + Linux BSP

### Mechanical

- + COM Express Compact form factor 95 mm wide x 95 mm long x 14.5 mm high

### RoHS Compliant