

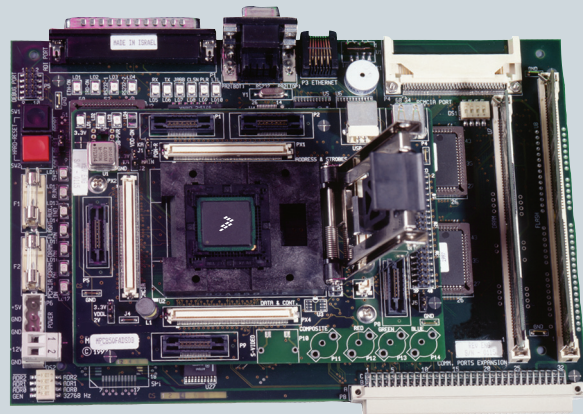
# MPC860 and MPC850

Freescale Semiconductor's MPC860FADS and MPC850SRFADS are family application development systems (FADS) designed to aid hardware and software developers working with the MPC860 PowerQUICC™ Quad Integrated Communications Controller and the MPC850 Integrated Communications Processor in quickly evaluating and developing applications for these devices. The FADS boards comprise of a motherboard/daughterboard combination, providing a common evaluation platform for both the MPC860 and MPC850 Families.

Using the FADS onboard resources and its associated debugger, developers may download and run code, set breakpoints, display memory and registers, and connect proprietary hardware via the expansion connectors. Then, with an MPC860 or MPC850 processor, that code can be incorporated into a desired system. This board can also be used as a demonstration tool. For example, application software may be burned into the board's Flash memory and run at exhibitions.

The MPC860FADS includes SDRAM and comes populated with an 860P processor. The MPC860TFADS comes populated with an 860T processor. The MPC850SRFADS, while very similar to the MPC860FADS, has a 256-pin BGA socket instead of a 357-pin BGA socket. The MPC850SRFADS supports USB functionality and comes populated with the high-end product, 850SR.

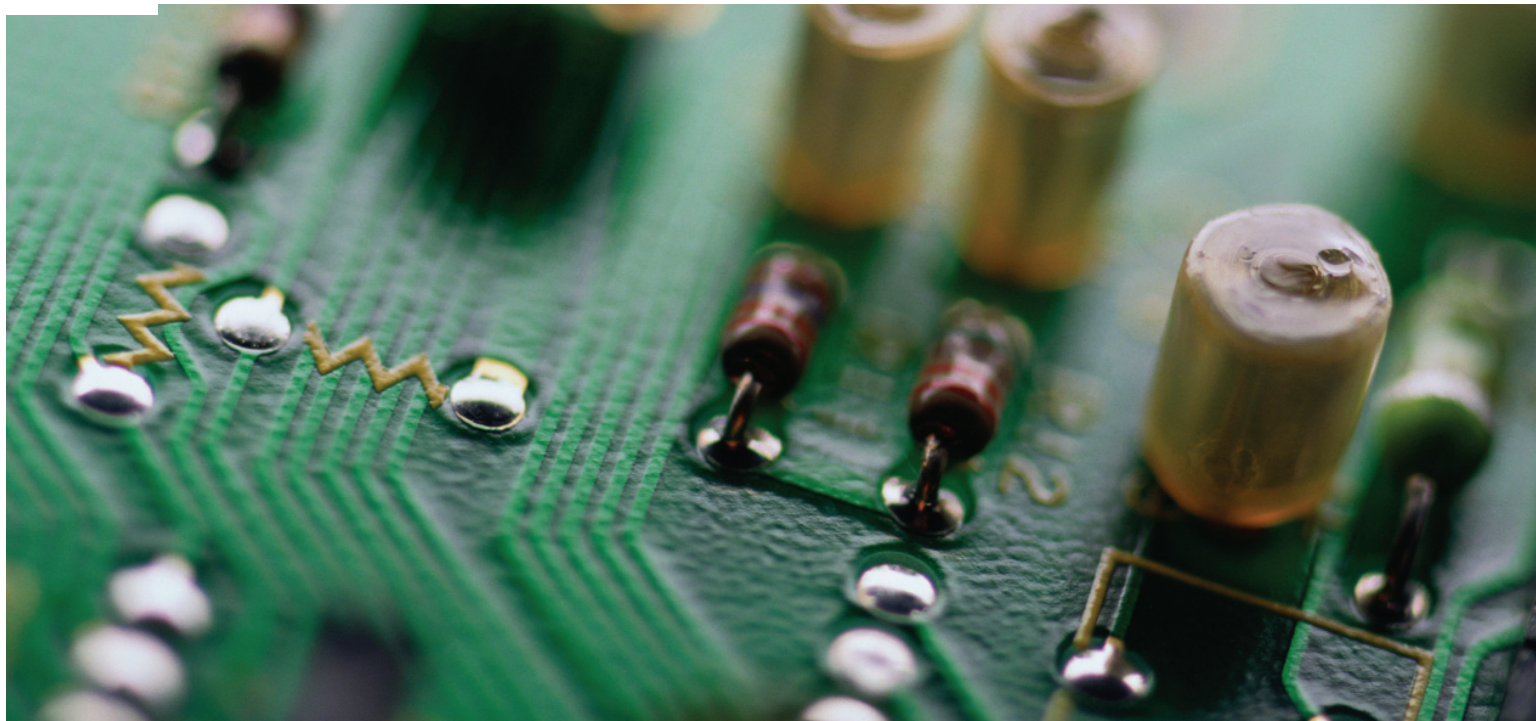
MPC860FADS and MPC850FADS



### **MPC860/850SRFADS**

#### **Motherboard Specifications**

- > Onboard debug port controller with ADI interface
- > 4 MB, unbuffered synchronous DRAM onboard
- > 4 MB EDO 60 ns DRAM SIMM with support for 4–32 MB FPM or EDO DRAM SIMMs
- > Automatic DRAM SIMM identification
- > 2 MB Flash SIMM with support for up to 8 MB
- > Automatic Flash SIMM identification
- > 10 base-T port with standby mode
- > Board control and status register
- > Memory Disable option for each local memory map slave
- > Fast-IrDA (4 Mbps) port with standby mode
- > Module enable indications
- > 5V only PCMCIA socket with full buffering, power control, and port disable option
- > Dual RS232 ports with low-power option
- > Single 5V supply
- > Reverse/Over voltage protection for power inputs
- > External tools identification capability
- > Onboard debug port controller with ADI I/F



### **MPC860FADS**

#### **Daughterboard Specifications**

- > Supports MPC860P running up to 80 MHz
- > Option for Fast Ethernet over fiber-optics (Ethernet 100Base FX with MPC860T only)
- > Selectable KAPWR source, 3.3V or externally supplied
- > Selectable clock source, 32768 Hz crystal resonator or 4 MHz clock generator
- > Onboard expansion connectors, including all MPC pins and MPC860FADS control/status registers
- > Onboard high-density mictor logic analyzer connectors, supporting fast connection to HP16500 logic analyzer
- > Add-on MPC860SR-PHY adapter board providing ATM 155, ATM 25.6, and E1/T1 physical layer for 860SR development connects to MPC860FADS via 96-pin connector

### **MPC850SRFADS**

#### **Daughterboard Specifications**

- > MPC850SR running up to 80 MHz
- > USB port with shutdown option
- > USB port speed control
- > 5V supply for USB port
- > Selectable KAPWR source, 3.3V or externally supplied
- > Selectable clock source, 32768 Hz crystal resonator or 4 MHz clock generator
- > Onboard expansion connectors, including all MPC pins and MPC850SRFADS control/status registers
- > Onboard high-density mictor logic analyzer connectors, supporting fast connection to HP16500 logic analyzer
- > Add-on MPC860SR-PHY adapter board providing ATM 155, ATM 25.6, and E1/T1 physical layer for 850SR development connects to MPC860FADS via 96-pin connector

### **Ordering Information**

Application development interface (ADI) card: Most customers will still require an ADI card to use with either the 860FADS or 850SRFADS. For both the MPC860FADS and the MPC850FADS, customers should order one of the parts listed in the right column of the table below.

Product	Part Number
MPC860 FADS Board	MPC860FADS
MPC850 FADS Board	MPC850SRFADS
MPC860T FADS Board	MPC860TFADS
ADI Card for PC	MPC860ADI-PC
ADI Card for SUN4	MPC860ADI-SUN4

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