HSM/530

Early Release
July 06 1999

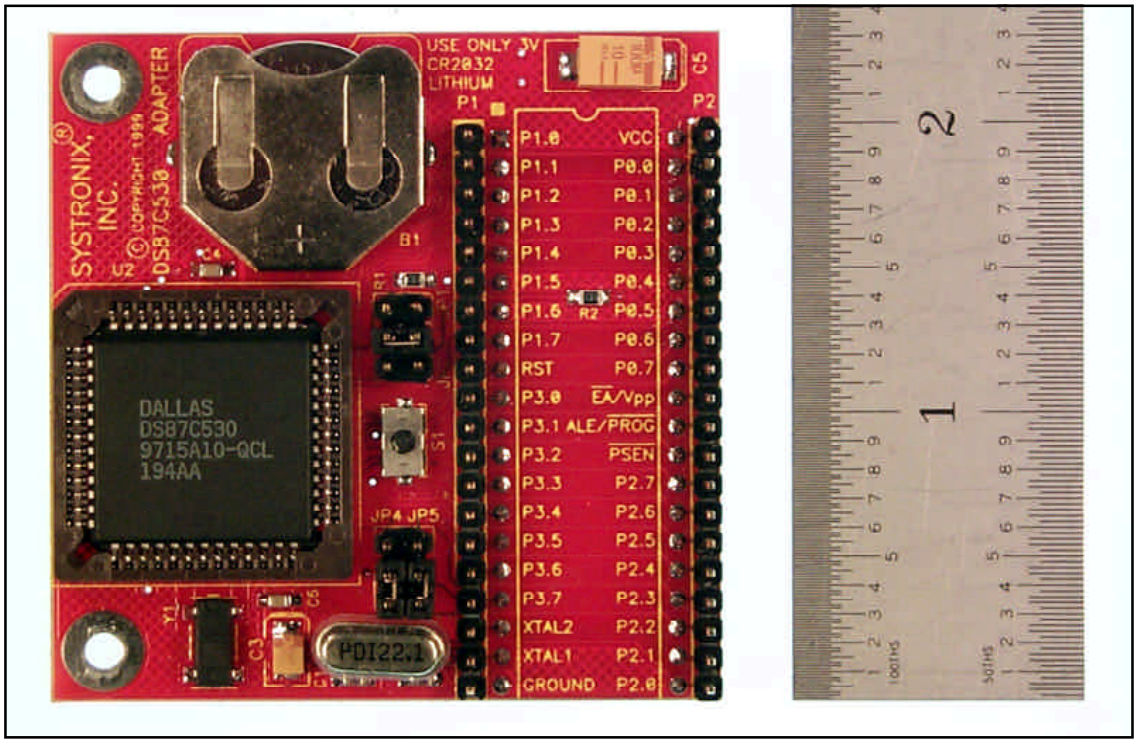
SYSTRONIX®

Dallas 87C530 High Speed Microcontroller Development & Programming Adapter

The new HSM/530 adapts to any DIP40 socket

Powerful Dallas High Speed Microcontroller core with clock & calendar, clock crystal & battery.

Also adapts the C530 to universal programmers.



Develop with the new DS87C530 High Speed Microcontroller.

8.3 MIPs. 1 KByte SRAM, clock & calendar.

$69 (33 MHz). $199 with 33 MHz HSM/320 board.

Rev up your development with a warp-speed 8051 core, clock and calendar and more.

HSM/530 adapts the 87C530 PLCC52 package to plug into a standard DIP40 socket. It's especially great when plugged into the Systronix HSM/320 board.

HSM/530 lets you use the 87C530 in any board with a DIP40 socket, as well as program the 87C530 in a universal programmer.

Includes the new Systronix RAD51 assembler and development environment! Device drivers and example programs with source code are included.

- On board CR2032 lithium battery which powers the clock crystal and backs up the 1 KByte of 87C530 SRAM.
- 32.768 KHz clock crystal
- reset pushbutton
- jumpers to select local or on-board controller crystal
- Powerful serial loader& utility EPROM (when used with HSM/KISS and loader rev D or later).
- Dual rows of labelled .025 headers for all DIP40 controller pins.
- ROM select jumpers
- Real technical support included!
- Latest info: www.systronix.com, or email to info@systronix.com

What are Dallas High-Speed Microcontrollers?

Dallas High Speed Microcontrollers (HSMs) are high performance, low power, CMOS 8051 code-compatibles with a radical new processor core. Instead of a generic 8051's 12 clocks per instruction cycle, the HSMs complete an instruction cycle in only 4 clock periods. Combine that 3X performance boost with clock speeds up to 33 MHz and you've got an 8.3 MIP CMOS controller!

Other unique features include five external interrupts, an on-board watchdog timer, power-fail interrupt, dual UARTs, dual data pointers, and flexible power-conservation options. For data, contact Dallas Semiconductor at 972-371-4000 or www.dalsemi.com, or follow the links from www.systronix.com.

True 33 MHz Zero Wait-State Performance

The High Speed Micros require faster memory and I/O circuitry, and have much faster strobe slew rates. This is different enough from generic 12- and 16- MHz 8051s to require careful system design. HSM/530 is rigorously designed to meet all manufacturer's timing requirements over worst case temperature and power variations, *with no "wait states"*.

Program the 87C530 in Universal Programmers

HSM/530 adapts the PLCC52 package to a DIP40. All DIP40 pins are the same as a DIP40 87C520. You can thus program an 87C530 in any universal programmer which supports the 87C520.

60 KBytes each of Code and Data plus 4 KByte I/O space

The High Speed Micros have the same 16-bit address space as 8051s, for up to 64 KBytes each of code and data. HSM/550 delivers with a full complement of memory: 60 KBytes each of code and data (both are nonvolatile), and a 4 KByte memory mapped I/O space.

What is the Systronix Serial Loader?

The HSM/KISS motherboard includes our 87C530-aware serial loader. Now the Dallas High Speed Micro family is as simple to program as the Dallas DS5000 family. Using any terminal communication software (such as HyperTerminal), you can reprogram in seconds over a serial port without changing jumpers or unplugging and erasing EPROMs. In addition to HEX file transfer, the loader also supports memory and register reading & writing.

Includes new Systronix RAD51 IDE and 8051 Assembler

HSM/530 includes the new Systronix RAD51 Integrated Development Environment (IDE) and 8051-family assembler. (Requires 32-bit Windows).

How do I order?

Please refer to our *Product Matrix & Price List* and *Order Form* for detailed option and ordering information, or consult our web site for the latest information. Or pick up the phone and speak with a friendly Systronix sales engineer. Or email to sales@systronix.com.

Price (subject to change at any time):

With 33 MHz 87C530 OTP PLCC controller, $69.

Bundled with 33 MHz HSM/320 motherboard $199.

SPECIAL PRICE

TECHNICAL DETAILS

Microcontroller Socketed PLCC52 Dallas DS87C530-33 MHz. All DIP40 ports are presented on labelled headers.

Memory DS87C530 includes 1 KByte of on-chip SRAM and 16 KBytes of on-chip EPROM.

Power The HSM530 adapter is powered by your motherboard through pins 20 and 40 of th e DIP40 header.

Switches & Jumpers Reset(H) pushbutton.

Clock & Calendar CR2032 lithium battery (also provides SRAM backup).

Easy Program Loading Serial program loading of HEX files initiated by on-card pushbutton (on the HSM/320 motherboard). Your HSM/320 must have loader rev D or later to support the special registers of the C530. Older versions of HSM/320 will still work but without the special support for the C530. The auto-bauding serial loader is only active in LOAD mode. In RUN mode it is inactive, giving your program complete control of all controller resources.

Size 2.300 inches (58.42 mm) square. Two 4-40 clearance mounting holes 0.120 inch (3.00 mm) ID on 2.000 inch (50.8 mm) centers

Environmental Commercial temperature 0 to 70 deg C.

Support & Warranty Friendly technical support. One year warranty against defects, and fast turn-around on repairs.

All systems include:

- Printed user manual & technical reference
- New! Systronix RAD51 assembler & IDE (requires Windows 95, 98 or NT)
- Sample programs in assembly code

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