

Technologies of the Month and Interesting Items from ESC

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USB Sushi or Thumb Drive

- USB 2.0
- 32 or 128 Mb
- \$99



<http://dynamism.com/sushidisk/main.shtml>
<http://dynamism.com/thumb/main.shtml>

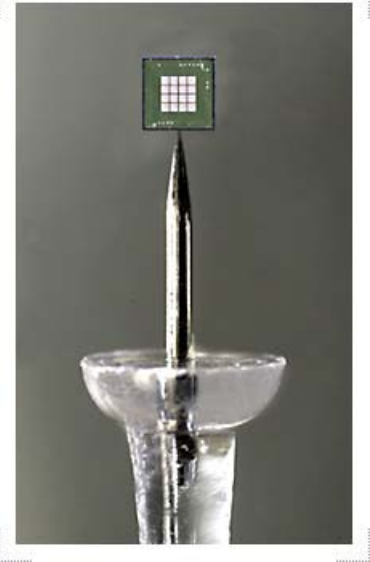
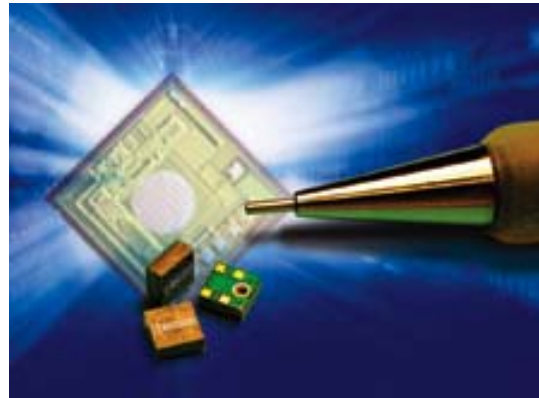
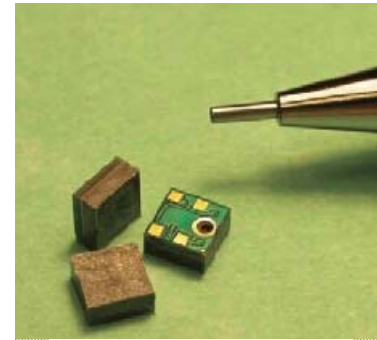
Serial Bluetooth Module

- Built-in antenna
- 30m range
- UART serial interface
- \$52.95
- Test Jig Kit also available \$187
- Other models available



Single Chip Microphone

- Replaces electret condenser microphones
- Digital output with modulator
- \$3.87 / 1000
- Larger analog output part available



Tiny Switch Sports Two LEDs

- Any combination of red, green, yellow, or blue available
- 8 by 4 mm



A Review of Five Tiny SBC Modules

- A Pack of GumStix
- Xscale Module Kit Delivers PCI and VGA Support
- Lighting a Coldfire with Netburner
- Sticking it to the Developer
- Java Module Delivers Flexibility and Power

Kontron X-board

- SIMM module
- Intel Xscale 80219 microcontroller and Silicon Motion SM501 display chip
- 400 and 800 Mhz versions
- Up to 64 Mbytes of on-module flash and 128 Mbytes of PC200 DDR-SDRAM.



NetBurner's MOD5213

- Freescale MCF5213 32-bit Coldfire microcontroller
- JTAG interface
- 66 Mhz
- 256 Kb Flash and 32 Kb SRAM
- CAN 2.0B controller with 16 message buffers
- Three UARTs with DMA capability
- Queued serial peripheral interface (QSPI)
- I²C controller
- Four 32-bit timer channels with DMA capability
- Four 16-bit timer channels with capture/compare/PWM
- 4-channel 16-bit or 8-channel 8-bit PWM generator
- Two periodic interrupt timers
- 4-channel DMA controller
- 8-channel 12-bit ADC
- Up to 33 general-purpose I/O (GPIO shared with other peripherals)
- μ C/OS operating system



Silicon Labs ToolStick

- 8051 development through USB interface
- FM Tuner application
- Keil and C development tools



Systronix TStik2

- C, Java, or assembler development
- Ethernet interface
- Backup battery
- \$209
- DS80C400 processor
- 2 Mbytes of flash, 512 kbytes or 1 Mbyte of NVRAM (on-module lithium battery)
- TiniOS operating system, Ethernet stack, and Java support consume less than 512 kbytes of flash leaving over 1.5Mbytes for application space



Walletex USB

- 64 Mb to 2 Gb
- \$25 to \$170
- Thickness of 2 credit cards
- USB 2
- Waterproof



3-Axis Magnetometer

- \$225
- SPI interface



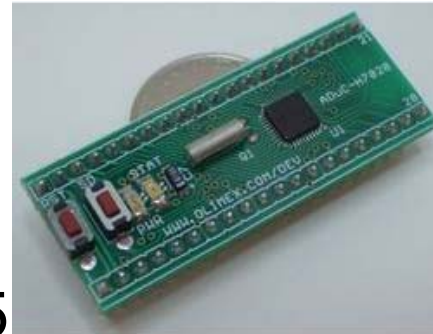
ADuC 7020 MiniKit

- MiniKit: Board and download cable - \$30
- IAR and Keil evaluation software
- Example code
- Function libraries
- Application notes
- PLA programming tool



Spark Fun ADuC 7020 Products

- Header board - \$44.95
- Carrier board - \$25.95
- Mini-terminal board - \$79.95
- Relay board - \$69.95



Secure Digital ZigBee Card

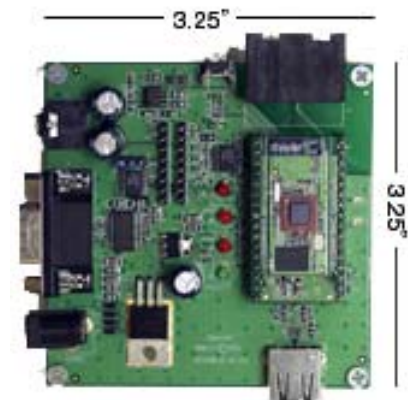
- Low power
 - 30 ma TX/RX
 - 3 ua standby
- For use in PDAs, cell phones
- Software development kit - \$895

- Serial interface module also available - \$49.95



Bluetooth Module

- Uses AT serial commands
- On board antenna
- DIP or BGA configurations
- Evaluation kit available



USB to I²C / SPI Host Adapters

- Aardvark – I²C and SPI - \$250
- Cheetah – fast SPI - \$350
- Beagle Protocol Analyzer for USB (\$400) and I²C / SPI (\$300)



Smart Network Devices

- StarTarget7
 - ARM720T, 48 Mhz, 8 Mb SDRAM, 2/4 Mb Flash, 2 ethernet, serial, I²C, expansion boards
- WebTarget2
 - Hyperstone E1-16XS, 128 Mhz, 8 Mb SDRAM, 2/4 Mb Flash, ethernet, serial, I²C, SPI, 10-bit A/D, expansion boards
- WebTarget3
 - Hyperstone hyNet32S, 200 Mhz, 16 Mb SDRAM, 4 Mb Flash, 2 ethernet, 4 serial (UART, I²C, SPI, I²S, SSI), CAN, expansion boards

