

Interesting Items

Volume 16

Dave Jaffe

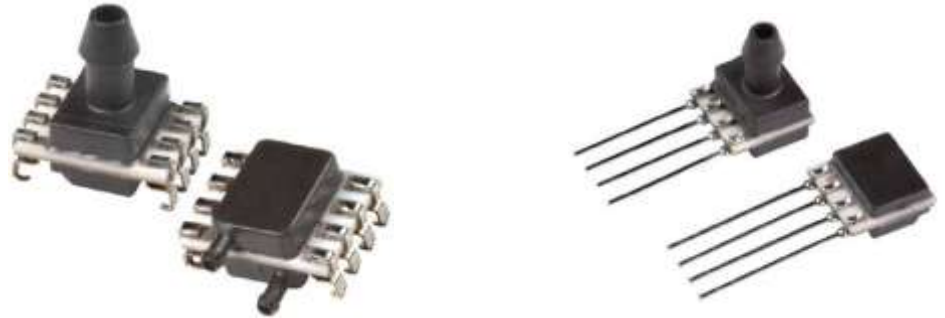
04/23/2011

Caveats

- I came across these products in recent magazines
- I have not bought or used these products
- I do not endorse these products
- I do not know much more about these products than what is presented

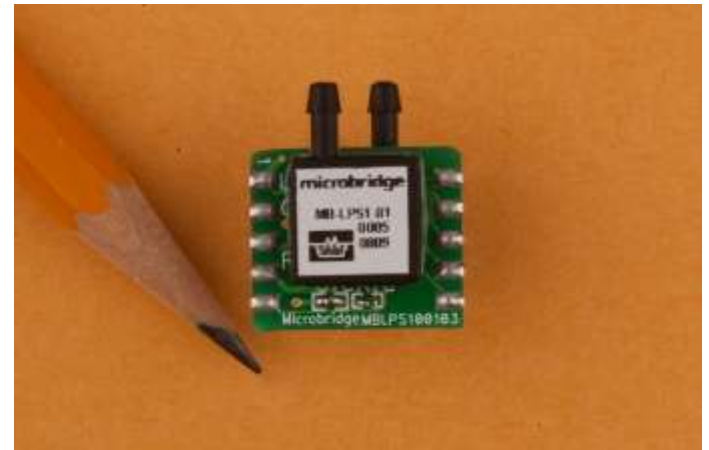
Pressure Sensors

- 12-bit analog output, I²C and SPI options
- 1 – 150 psi
- SMT and DIP
- 10 by 12.5 mm
- Standard and high-accuracy models



Pressure Sensor

- Analog output
- Thermo-anemometer sensing
- Differential pressure



MEMS Microphone

- 58 dB SNR
- Digital microphone
- PDM output
- Development kits available



High Performance Microphones

- Built-in amplification
- Needs 12 vdc
- Standard and weatherproof models
- \$10 & \$30



Color Slim Micro Pinhole Camera

- 400 line
- Needs 5-12 vdc
- \$200



Modem Modules

- Serial (TTL & RS232) and USB (1.1 and 2.0) interfaces



Serial to Ethernet Modules

- 10/100BaseT
- 3.3 vdc
- TCP/IP, UDP, Telnet, HTTP, ICMP, ARP
- 32 Kb RAM
- Module and development kit



Compact GPS Modules

- Serial interface
- Development kit available



<http://linxtechnologies.com/Products/RF-Modules/SR-Series-GPS-Receiver-Module/>
<http://linxtechnologies.com/Products/Basic-Evaluation-Kits-Master-Development-Systems/SR-Series-GPS-Module-Master-Development-System/>

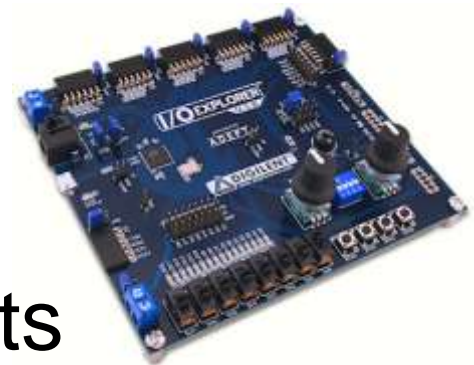
WiFi Transceiver Module

- Low power, 2.4 Ghz, 802.11
- SPI interface
- Surface mount - \$30



USB I/O Experimentation Board

- USB-based I/O expansion board for PC
- Educational use
- Servos, rotary encoders, switches, speaker/buzzer, ADC, DAC, UART
- AVR microcontroller
- \$100
- Lots of other interesting products



USB Datalogger

- Oscilloscope input
- 4 digital I/O
- Signal generator output
- Microphone, pH sensor input
- Light sensor, 3-color LED indicator
- Software development kit available
- \$163 / \$361



Windows on an iPad

- No-cost VMware View Client (need the not-free server software)
- Run Windows 7 apps
- Works over WiFi and 3G networks
- No local printing



<http://blogs.vmware.com/view/2011/03/view-client-for-ipad.html>

<http://www.eweek.com/c/a/Virtualization/VMware-View-Client-for-iPad-Brings-Windows-to-Apple-Users-583711/>

Motion Sensor



- Three-axis accelerometer and gyro
- Digital motion processor to process sensor data – for hand gesture identification
- SPI and I²C interfaces
- \$3

Accelerometer Development Kit

- 12-bit
- I²C chip interface, USB kit interface
- 3-axis – 2g/4g/8g
- \$105



9-axis Wireless Sensor

- 3-axis accelerometer / gyro / magnetometer
- Wireless interface
- Development kit available



<http://www.ecnmag.com/Products/2011/04/Sensors/The-MotionPod/>

<http://www.movea.com/index.php/products/motionic-hardware/motionpod>

Wireless Ultrasonic Level Sensor

- Uses ZigBee RF modules
- 4" to 13' range
- Pipe fitting



TI \$4.30 Development Kit

- LaunchPad – MSP430
- DIP target socket
- USB-powered emulator
- Free integrated development environment software
- Onboard LEDs, pushbuttons, and I/O pins



LPC1768 Development Board

- 40-pin DIP
- Looks like a USB flash drive
- 100 Mhz ARM, 64Kb RAM, 512Kb Flash
- \$59 from Digi-Key
- SPI, I²C, UART, CAN
- GPIO, PWM, ADC, DAC
- C++ development environment



<http://parts.digikey.com/1/parts/1724397-development-board-lpc1768-mbed-om11043.html>

<http://datasheet.octopart.com/OM11043-NXP-datasheet-8423700.pdf>

PIC32 Ethernet Starter Kit

- PIC32 @ 80 Mhz
- 512 Kb Flash, 128 Kb RAM, DMA (8 channels)
- Ethernet, CAN, USB
- IDE and C compiler
- \$72





Arduino Nano

- ATmega328 (Arduino Nano 3.0)
- ATmega168 (Arduino Nano 2.x)
- 14 I/O pins (6 do PWM)
- 32/16 Kb Flash, 2/1 Kb RAM, 1024/512 b EEPROM
- I²C and SPI, TTL Serial, USB interfaces
- \$46.80



Arduino Mega

- ATmega1280
- 54 I/O pins (14 do PWM)
- 16 ADC
- 128 Kb Flash, 8 Kb RAM, 4 Kb EEPROM
- I²C and SPI, TTL Serial, USB interfaces
- \$58.15

Multi-channel Pocket Oscilloscope

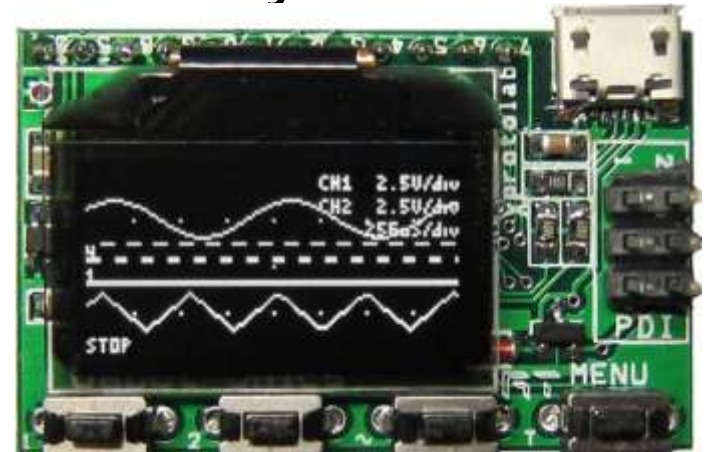
- 2 digital and 2 analog channels
- 2 Mb flash disk
- 30 Mhz bandwidth
- \$200
- 3" 240x400 color display
- SD card slot for waveform storage (?)



Xprotolab



- Mixed-signal (analog [200 KHz] & digital) oscilloscope & arbitrary waveform generator on a DIP
- Meter, XY, and Spectrum Analyzer modes – USB interface
- \$35
- Sold by Saelig



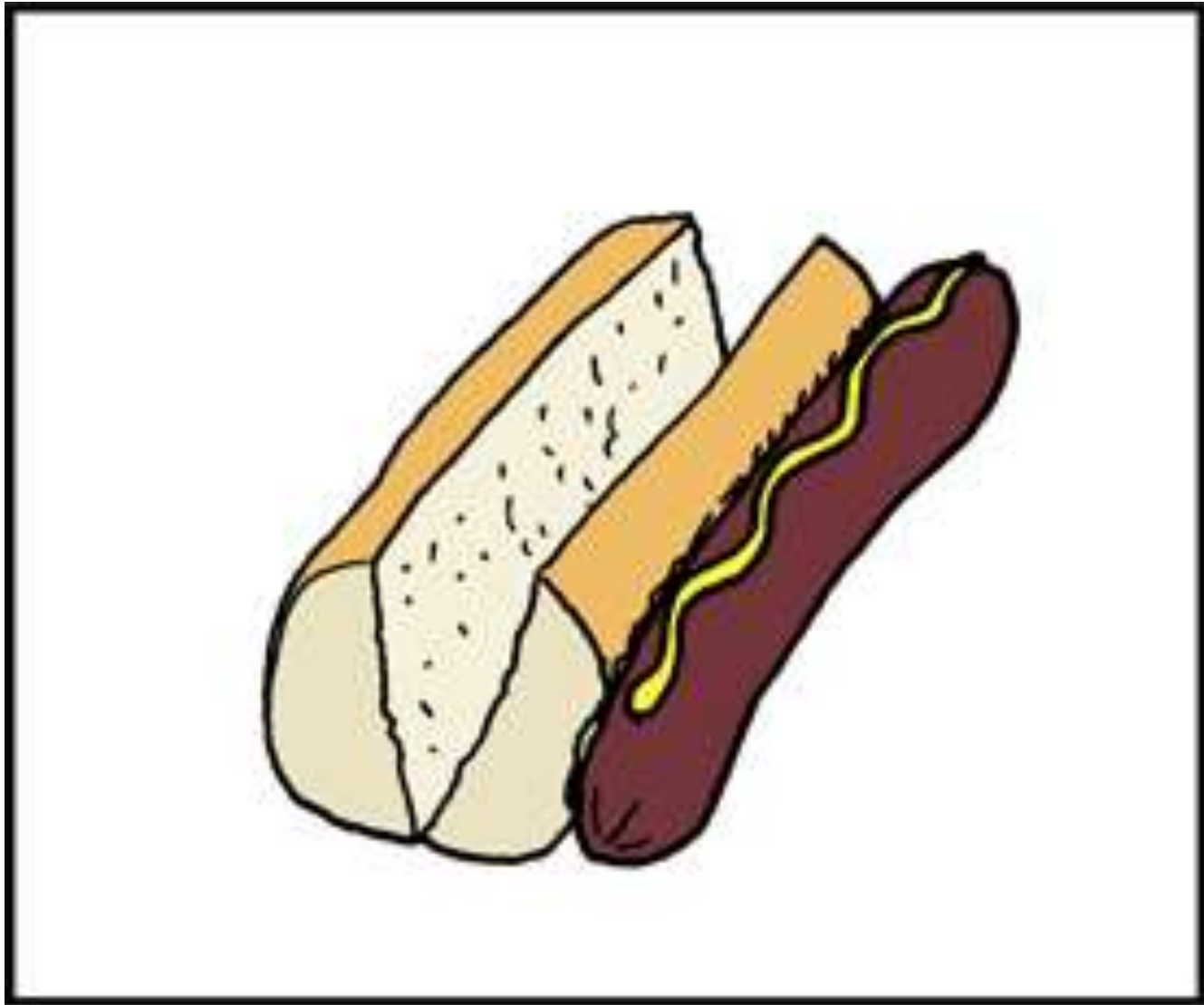
High Tech Car Door



<http://www.flixxy.com/high-tech-car-door.htm>







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