

# Interesting Items

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# 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

# Joystick Switch

- 5-position switch
- 20 ma @ 12v
- Surface mount



# Magnetic Sensor

- 3-axis Hall-effect device
- 12 bit angular resolution
- Selectable analog (Ratiometric), PWM, or serial protocol



# Thin-Film Battery

- Backup applications in microcontrollers, memory, real-time clocks
- 12, 50, and 80uAh capacities
- Surface mount



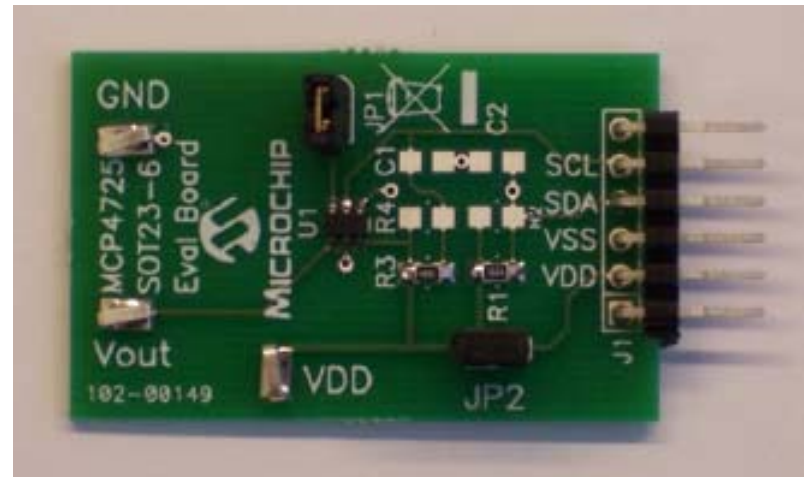
# Disk Jog Switch

- 5 tactile switches
- 5 optional LEDs
- Uses two Hall-effect sensors
- \$8.16 with LEDs, \$7.75 without LEDs



# Digital-to-Analog Converter

- Integrated EEPROM for power-up settings
- 12-bit resolution
- 6-pin SOT-23 package
- Evaluation board



# Motion Sensors



- Passive infrared
- Miniature package
- Lens and amplifier built-in
- Digital and analog outputs available
- 4 models



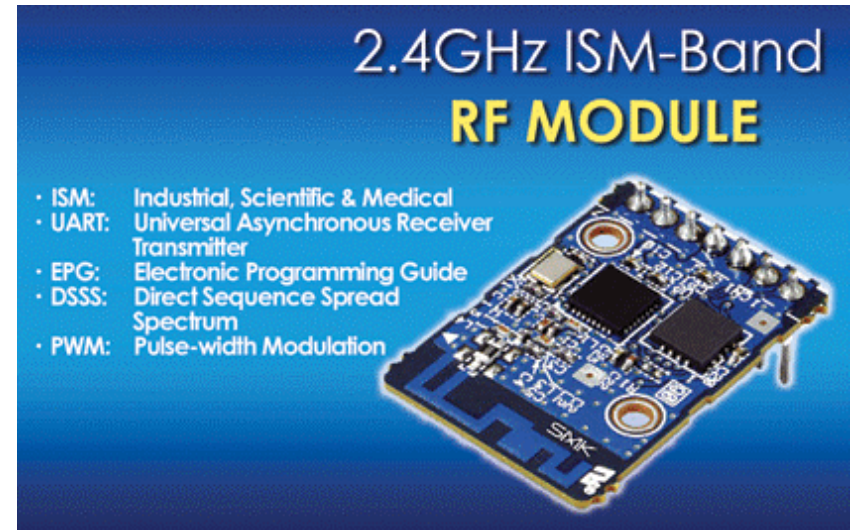
# USB to RS-232/RS-485 Converter

- Powered from USB port
- DB9 serial connector or screw terminals



# RF Module

- UART interface
- 2.4 GHz ISM band
- 20 m range
- Embedded antenna
- Remote control applications



# Battery-Free Wireless Module

- Employs energy harvesting
- ZigBee mesh networking standard
- Powered from solar, EM fields, piezo
- \$21 per unit in large quantities
- \$1290 for starter kit
- \$6950 for developer's suite



# Triaxial MEMS Accelerometer

- SPI / I<sup>2</sup>C interfaces
- +/- 2G and +/- 8G
- Analog or digital output models
- \$1.50 in quantity



# Strain Sensing Modules

- Energy harvesting
- ZigBee wireless transceiver
- On-board data logging



# Input Module

- Combines navigation pad module with motion sense and interface IC
- 5-way rocker switch and scrollwheel functions
- Capacitance sensing



# Triaxial Inertial Sensor

- Triaxial gyro and accelerometer
- 14-bit gyro resolution – 3 ranges
- 14-bit accelerometer resolution - +/- 10 G range
- 350 Hz bandwidth
- Evaluation board available



# Ultracompact Mobile Computer

- Runs Windows XP or Vista
- 512 Mb RAM, 30 Gb hard drive
- Bluetooth, WiFi, USB, camera
- 5 inch display, VGA, ethernet
- \$1500
- “FlipStart” – 1.5 Lb



<http://www.flipstartpc.com/>



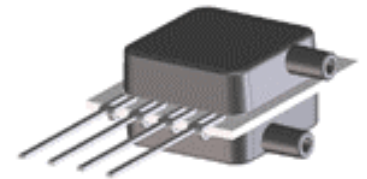
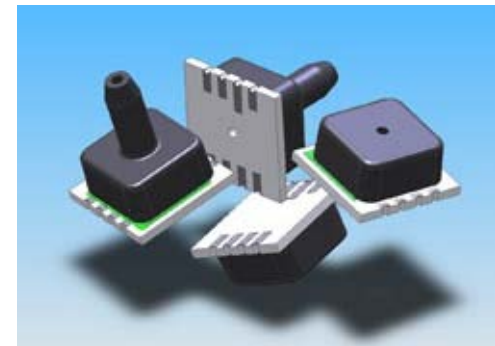
# Lenovo ThinkPad X300 Laptop

- .73" thin, 3.13 Lb
- Includes DVD burner
- 64 Gb Flash disk
- 13.3 inch display
- Windows XP only
- \$2800



# Pressure Sensors

- Amplified very low pressure sensor - .25 and .5 inch H<sub>2</sub>O
- Surface mount – 10 inch H<sub>2</sub>O to 100 psi
- Miniature amplified – 1 and 30 inch H<sub>2</sub>O
- Millivolt output 1 and 30 inch H<sub>2</sub>O



# Motion Tracker

- Real-time tracking of position (6 dof), orientation, and movement of people and objects
- Application in head-worn displays, autonomous tracking
- Continuous position referencing from passive markers



# Nanopump

- Permanent electronics and disposable reservoir (6 ml)
- Application in insulin delivery

