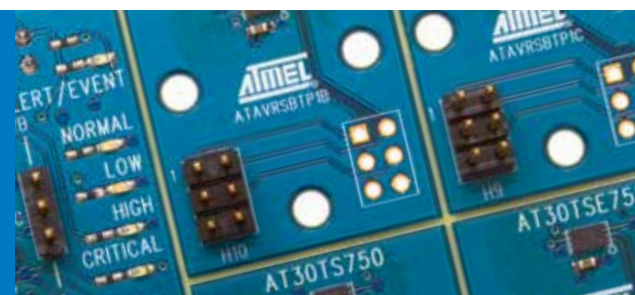




# Atmel AVR Xplained

## Evaluate the AVR



Atmel® Xplained MCU kits provide great platforms for early evaluation of the Atmel AVR. The kits contain a high-performance AVR microcontroller, QTouch® slider and button sensors, LEDs and a USB port. The boards are powered by the USB cable, and the USB port is also used to download new firmware to the AVR device. The boards are also equipped with the standard 10-pin JTAG header that connects to the full range of Atmel AVR debuggers.

The Xplained MCU boards are excellent for evaluating Atmel Studio with the Atmel Software Framework. The Atmel Software Framework works with both Atmel Studio and IAR Embedded Workbench. Customers can take advantage of a large library of drivers, services and applications available at [www.atmel.com/xplained](http://www.atmel.com/xplained).

### Key Features

XMEGA-A1 Xplained	XMEGA-A3BU Xplained	XMEGA-B1 Xplained	MEGA-1284P Xplained	UC3-L0 Xplained	UC3-A3 Xplained
<b>Ordering Code:</b> ATAVRXPLAIN	<b>Ordering Code:</b> ATXMEGAA3BU-XPLD	<b>Ordering Code:</b> ATXMEGAB1-XPLD	<b>Ordering Code:</b> ATMEGA1284P-XPLD	<b>Ordering Code:</b> AT32UC3L0-XPLD	<b>Ordering Code:</b> AT32UC3A3-XPLD
<b>Features:</b> <ul style="list-style-type: none"> <li>• Atmel picoPower® 8-bit AVR XMEGA</li> <li>• ATxmega256A1</li> <li>• 8 mechanical buttons &amp; 8 LEDs</li> <li>• 8 MB SDRAM</li> <li>• Speaker</li> <li>• Temperature &amp; light sensors</li> </ul>	<b>Features:</b> <ul style="list-style-type: none"> <li>• Atmel picoPower® 8-bit AVR XMEGA</li> <li>• ATxmega256A3BU</li> <li>• 128x32 pixel FSTN LCD Display</li> <li>• QTouch button</li> <li>• 3 mechanical buttons &amp; 2 LEDs</li> <li>• 64 MB Dataflash</li> <li>• Temperature &amp; light sensors</li> </ul>	<b>Features:</b> <ul style="list-style-type: none"> <li>• Atmel picoPower® 8-bit AVR XMEGA</li> <li>• ATxmega128B1</li> <li>• Segment LCD Display</li> <li>• USB connectivity</li> <li>• QTouch button</li> <li>• 3 mechanical buttons &amp; 2 LEDs</li> <li>• Temperature &amp; light sensors</li> </ul>	<b>Features:</b> <ul style="list-style-type: none"> <li>• Atmel picoPower® 8-bit AVR XMEGA</li> <li>• ATmega1284P</li> <li>• QTouch button</li> <li>• Temperature &amp; light sensors</li> <li>• 4 LEDs</li> </ul>	<b>Features:</b> <ul style="list-style-type: none"> <li>• Atmel picoPower® 32-bit AVR UC3</li> <li>• AT32UC3L064</li> <li>• QTouch button &amp; slider</li> <li>• Temperature sensor</li> <li>• 1 mechanical button &amp; 3 LEDs</li> </ul>	<b>Features:</b> <ul style="list-style-type: none"> <li>• Atmel 32-bit AVR UC3</li> <li>• AT32UC3A3256</li> <li>• HiSpeed USB Device</li> <li>• QTouch button &amp; slider</li> <li>• 8 MB SDRAM</li> <li>• 1 Mechanical button &amp; 4 LEDs</li> <li>• Temperature sensor</li> </ul>

### Xplained Top Modules

All Xplained MCU boards contain four expansion headers that provide easy access to analog and digital I/O pins. These expansion headers are compatible across all MCU boards so top-modules can be stacked on MCU boards for added functionality.



Inertial Sensor 1	Inertial Sensor 2	Pressure Sensor 1	Light and Proximity 1	Security Xplained	Temperature Xplained
<b>Ordering Code:</b> ATAVRSBIN1	<b>Ordering Code:</b> ATAVRSBIN2	<b>Ordering code:</b> ATAVRSBPR1	<b>Ordering code:</b> ATAVRSBLP1	<b>Ordering code:</b> ATAVRSECURITYX	<b>Ordering code:</b> ATAVRTEMPSENSORX
<b>Featuring:</b> <ul style="list-style-type: none"> <li>• Bosch Accelerometer (BMA150)</li> <li>• Invensense Gyroscope (ITG-3200)</li> <li>• AKM Compass (AK8975)</li> </ul>	<b>Featuring:</b> <ul style="list-style-type: none"> <li>• Honeywell Magnetometer (HMC5883L)</li> <li>• Kionix Accelerometer (KXTF9)</li> <li>• InvenSense Gyroscope (IMU-3000)</li> </ul>	<b>Featuring:</b> <ul style="list-style-type: none"> <li>• Bosch barometric pressure sensor (BMP085)</li> </ul>	<b>Featuring:</b> <ul style="list-style-type: none"> <li>• Osram Opto Semiconductors ALS sensor (SFH7770)</li> <li>• Osram IR emitters (SFH4059)</li> </ul>	<b>Featuring:</b> <ul style="list-style-type: none"> <li>• Atmel AVR ATSHA204</li> <li>• SHA-256</li> <li>• Client/host authentication with EEPROM</li> </ul>	<b>Featuring:</b> <ul style="list-style-type: none"> <li>• AT30TS750 (-40°C to +125°C)</li> <li>• Temperature sensor AT30TSE002B (-20°C to +125°C)</li> <li>• Temperature sensor &amp; Serial EEPROM</li> </ul>

For more information, visit <http://www.atmel.com/Xplained>