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.

### Key Features

<table>
<thead>
<tr>
<th>XMEGA-A1 Xplained</th>
<th>XMEGA-A3BU Xplained</th>
<th>XMEGA-B1 Xplained</th>
<th>MEGA-1284P Xplained</th>
<th>UC3-L0 Xplained</th>
<th>UC3-A3 Xplained</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ordering Code:</strong> ATAVRXPLAIN</td>
<td><strong>Ordering Code:</strong> ATXMEGAA3BU-XPLD</td>
<td><strong>Ordering Code:</strong> ATXMEGAB1-XPLD</td>
<td><strong>Ordering Code:</strong> ATMEGA1284P-XPLD</td>
<td><strong>Ordering Code:</strong> AT32UC3L0-XPLD</td>
<td><strong>Ordering Code:</strong> AT32UC3A3-XPLD</td>
</tr>
</tbody>
</table>

**Features:**
- Atmel picoPower®
- 8-bit AVR XMEGA ATxmega256A1
- 8 mechanical buttons & 8 LEDs
- 8 MB SDRAM
- Speaker
- Temperature & light sensors

---

**Features:**
- Atmel picoPower®
- 8-bit AVR XMEGA ATxmega256A3BU
- 128x32 pixel FSTN LCD Display
- QTouch button
- 3 mechanical buttons & 2 LEDs
- 64 MB Dataflash
- Temperature & light sensors

---

**Features:**
- Atmel picoPower®
- 8-bit AVR XMEGA ATxmega128B1
- Segment LCD Display
- USB connectivity
- QTouch button
- 3 mechanical buttons & 2 LEDs
- Temperature & light sensors

---

**Features:**
- Atmel picoPower®
- 8-bit AVR XMEGA ATmega1284P
- QTouch button
- Temperature & light sensors
- 4 LEDs

---

**Features:**
- Atmel picoPower®
- 32-bit AVR UC3 AT32UC3L064
- QTouch button & slider
- Temperature sensor
- 1 mechanical button & 3 LEDs

---

**Features:**
- Atmel 32-bit AVR UC3 AT32UC3A3256
- HiSpeed USB Device
- QTouch button & slider
- 8 MB SDRAM
- 1 Mechanical button & 4 LEDs
- Temperature sensor
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.

<table>
<thead>
<tr>
<th>Inertial Sensor 1</th>
<th>Inertial Sensor 2</th>
<th>Pressure Sensor 1</th>
<th>Light and Proximity 1</th>
<th>Security Xplained</th>
<th>Temperature Xplained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordering Code: ATAVRSBIN1</td>
<td>Ordering Code: ATAVRSBIN2</td>
<td>Ordering code: ATAVRSPBP1</td>
<td>Ordering code: ATAVRSPBLP1</td>
<td>Ordering code: ATAVRSECURITYX</td>
<td>Ordering code: ATAVRTEMPSENSORX</td>
</tr>
</tbody>
</table>

- **Featuring:**
  - Bosch Accelerometer (BMA150)
  - Invensense Magnetometer (HMC5883L)
  - Kionix Accelerometer (KXTF9)
  - InvenSense Gyroscope (IMU-3000)

- **Featuring:**
  - Honeywell Accelerometer (HMC5883L)
  - Osram Opto Semiconductors ALS sensor (SPH7770)
  - Osram IR emitters (SFH4059)

- **Featuring:**
  - Bosch barometric pressure sensor (BMP085)
  - Atmel AVR ATSHA204
  - Atmel AVR ATSHA204
  - Client/host authentication with EEPROM

- **Featuring:**
  - Honeywell Magnetometer (HMC5883L)
  - Kionix Accelerometer (KXTF9)
  - InvenSense Gyroscope (IMU-3000)

- **Featuring:**
  - Atmel AVR ATSHA204
  - Atmel AVR ATSHA204
  - Client/host authentication with EEPROM

For more information, visit [http://www.atmel.com/Xplained](http://www.atmel.com/Xplained)