

## OMAP-L138 DSP + ARM processor and C6748 DSP features and benefits

Feature	Customer benefit
<b>Secure boot with standalone flashing utilities</b>	<ul style="list-style-type: none"> <li>• Enables storage of IP and image in encrypted form to external non-volatile memory (e.g. NAND and NOR flash)</li> <li>• Allows OMAP-L138 DSP + ARM to run code on the DSP, isolated from general purpose applications running on the ARM, using hardware firewalls to create isolated regions within the device during the boot process</li> </ul>
<b>Multi-layer encryption support</b>	Enables boot and application code protection and designation of other encryption keys to be used to decrypt boot modules
<b>Both processors contain:</b> <ul style="list-style-type: none"> <li>• Lowest-cost and lowest-power C6000™ DSP</li> <li>• Industry's lowest-power floating-point DSP</li> </ul>	Enables real-time system performance with floating-point operations for high-precision and wide dynamic range and fixed-point operations for even higher performance
<b>The OMAP-L138 DSP + ARM processor integrates a low-power ARM9™ core with the C6748 DSP for dual processing capabilities</b>	<ul style="list-style-type: none"> <li>• Offers flexibility to add intuitive human machine interfaces, touch screens or networking capabilities</li> <li>• Allows implementation of high-level system control with operating systems (Linux® and Windows Embedded CE)</li> </ul>
<b>Power options:</b> <ul style="list-style-type: none"> <li>• OMAP-L138 DSP + ARM processor with 480mW total power and 11mW in sleep mode</li> <li>• C6748 DSP with 420mW total power and 11 mW in sleep mode in common use cases</li> </ul>	Allows developers to implement portable, power efficient applications with signal processing capabilities
<b>Integrated peripherals:</b> Universal parallel port(uPP), Ethernet MAC (EMAC), serial ATA (SATA), multimedia card/secure digital (MMC/SD), high-speed USB 2.0/1.1, video port interface and LCD controller	<ul style="list-style-type: none"> <li>• uPP allows high-speed connections to data converters, FPGAs or other processors</li> <li>• EMAC, SATA and MMC/SD enables desktop, network or portable connectivity or storage</li> <li>• LCD controller provides ability to add user interface and video port interface allows for video displays at video graphics array resolutions in product enhancement</li> </ul>