

C553x ultra-low-power DSPs features and benefits

Feature	Customer benefit
Generation includes the lowest price DSP on the market, starting at \$1.95	Enables sophisticated real-time processing at the price of a microcontroller
Up to 50 MHz and 100 MHz performance options for each DSP	Offers flexible price-performance options
Industry's lowest total power DSPs with total active core power < 0.15 mW/MHz at 1.05V and standby power < 0.15 mW	Extends battery life of portable applications
12 mm x 12 mm BGA package with 0.8mm pitch	Allows use of four-layer printed circuit board (PCB) to reduce overall system cost
I ² S, I ² C, UART, SPI, GPIO	Enables system connectivity and reduces system cost
<p>Unprecedented integration compared to other low-cost DSPs in the industry:</p> <p>On-chip memory options ranging from 64 KB to 320 KB for a variety of storage needs</p> <p>High-speed USB 2.0 with PHY, SD/eMMC</p> <p>Up to 1024-point programmable fast Fourier transform (FFT) co-processor (C5535 only)</p> <p>LCD display controller and 10-bit, four-channel successive approximation (SAR) ADC (C5535 only)</p> <p>1-3 low-dropout regulators (LDOs)</p>	<p>Enables increased algorithm integration in a single DSP for more sophisticated applications</p> <p>Enables USB applications and multiple storage options</p> <p>Increases computational throughput while providing energy efficiency for a long battery life and a reduction in total system power</p> <p>Enables increased user interaction while reducing overall system cost</p> <p>Reduces BOM cost and solution size</p>