

# Featured DSP Application Notes

Jumpstart your DSP design with Xilinx application notes describing specific design examples and methodologies.

Application notes illustrate how to use a Xilinx® product in a specialized way. Xilinx maintains a large database of application notes on numerous topics, including design files, to assist you in your next design. The main Application Notes search page, [www.xilinx.com/apps](http://www.xilinx.com/apps), includes different sections on specific market applications.

For application notes on digital communication, multimedia video and imaging, and defense systems, see our “XtremeDSP™ Selection Guide,” [www.xilinx.com/publications/prod\\_mktg/pn0010944-3.pdf](http://www.xilinx.com/publications/prod_mktg/pn0010944-3.pdf).

Part Number	Title	URL
<b>Design Methodology Application Notes</b>		
XAPP547	PowerPC Processor with Floating Point Unit for Virtex™-4 FX Devices	<a href="http://www.xilinx.com/bvdocs/appnotes/xapp547.pdf">www.xilinx.com/bvdocs/appnotes/xapp547.pdf</a>
<b>Error Correction Application Notes</b>		
XAPP222	Designing Convolutional Interleavers with Virtex Devices	<a href="http://www.xilinx.com/bvdocs/appnotes/xapp222.pdf">www.xilinx.com/bvdocs/appnotes/xapp222.pdf</a>
XAPP383	Single Error Correction and Double Error Detection (SEDED) with CoolRunner™-II CPLDs	<a href="http://www.xilinx.com/bvdocs/appnotes/xapp383.pdf">www.xilinx.com/bvdocs/appnotes/xapp383.pdf</a>
XAPP551	Viterbi Decoder Block Decoding – Trellis Termination and Tail Biting	<a href="http://www.xilinx.com/bvdocs/appnotes/xapp551.pdf">www.xilinx.com/bvdocs/appnotes/xapp551.pdf</a>
XAPP715	Multiple Bit Error Correction	<a href="http://www.xilinx.com/bvdocs/appnotes/xapp715.pdf">www.xilinx.com/bvdocs/appnotes/xapp715.pdf</a>
XAPP948	Hardware Acceleration of 3GPP Turbo Encoder/Decoder BER Measurement Using System Generator	<a href="http://www.xilinx.com/bvdocs/appnotes/xapp948.pdf">www.xilinx.com/bvdocs/appnotes/xapp948.pdf</a>
<b>DSP Processor Application Notes</b>		
XAPP634	Analog Devices TigerSHARC Link	<a href="http://www.xilinx.com/bvdocs/appnotes/xapp634.pdf">www.xilinx.com/bvdocs/appnotes/xapp634.pdf</a>
XAPP635	Interfacing Virtex-II FPGAs with Analog Devices TigerSHARC TS20x DSPs via LVDS Link Ports	<a href="http://www.xilinx.com/bvdocs/appnotes/xapp635.pdf">www.xilinx.com/bvdocs/appnotes/xapp635.pdf</a>
XAPP706	Alpha Blending Two Data Streams Using a DSP48 DDR Technique	<a href="http://www.xilinx.com/bvdocs/appnotes/xapp706.pdf">www.xilinx.com/bvdocs/appnotes/xapp706.pdf</a>
XAPP753	Interfacing Xilinx FPGAs to TI DSP Platforms Using the EMIF	<a href="http://www.xilinx.com/bvdocs/appnotes/xapp753.pdf">www.xilinx.com/bvdocs/appnotes/xapp753.pdf</a>
XAPP919	Video Virtual Socket Architecture	<a href="http://www.xilinx.com/bvdocs/appnotes/xapp919.pdf">www.xilinx.com/bvdocs/appnotes/xapp919.pdf</a>
<b>Transform Application Notes</b>		
XAPP610	Video Compression Using DCT	<a href="http://www.xilinx.com/bvdocs/appnotes/xapp610.pdf">www.xilinx.com/bvdocs/appnotes/xapp610.pdf</a>
XAPP611	Video Compression Using IDCT	<a href="http://www.xilinx.com/bvdocs/appnotes/xapp611.pdf">www.xilinx.com/bvdocs/appnotes/xapp611.pdf</a>
<b>Filter Application Notes</b>		
XAPP212	CDMA Matched Filter Implementation in Virtex Devices	<a href="http://www.xilinx.com/bvdocs/appnotes/xapp212.pdf">www.xilinx.com/bvdocs/appnotes/xapp212.pdf</a>
XAPP219	Transposed Form FIR Filters	<a href="http://www.xilinx.com/bvdocs/appnotes/xapp219.pdf">www.xilinx.com/bvdocs/appnotes/xapp219.pdf</a>