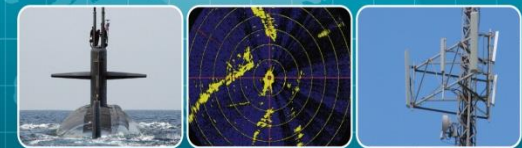
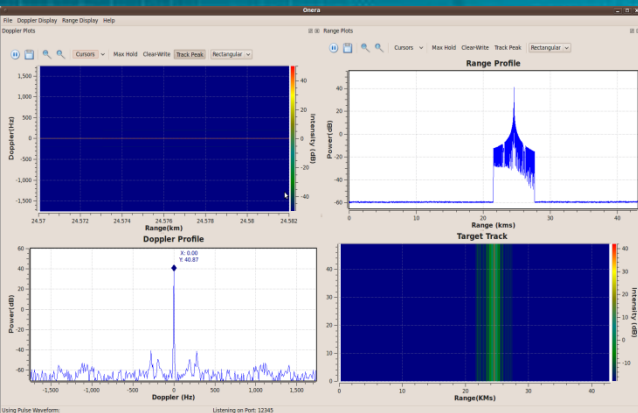


DTA-9590 Ultra-Wideband Scanning Receiver



500 MHz BW & 18 GHz Freq. Range

Low-Cost, Compact (1U) Ultra-Wideband Tunable Transceiver For Radar ELINT & Ultra-Wideband Spectrum Processing



SENSOR INTERFACE & PROCESSING COMPANY

www.d-ta.com

DTA-9590

Tunable (18 GHz) Ultra-Wideband (500 MHz) Receiver with I & Q Data to 10 Gigabit Networks for Radar ELINT, Ultra-Wideband Communications, Spectrum Surveillance...

- Compact 1U rack-mount system (also available in a rugged conduction-cooled package)
- 500 MHz to 18 GHz frequency range (expandable to up to 40 GHz) & 500 MHz Instantaneous BW
- 12-Bit 1.8 GSPS ADC with 63dB SFDR, optional 12-Bit 4 GHz DAC & DUC
- 2 Virtex 6 FPGAs with built-in DDC & DUC, 2x10 GbE Optical Networks & a separate 1 GbE Optical networks for Controls
- I & Q Data on 10 GbE networks for record/playback and/or real-time processing
- Real-Time recording / processing of baseband I & Q data using the DTA-1000R RAID server (see RFvision-2 Presentation)



DTA-9590L is a man-portable version of DTA-9590

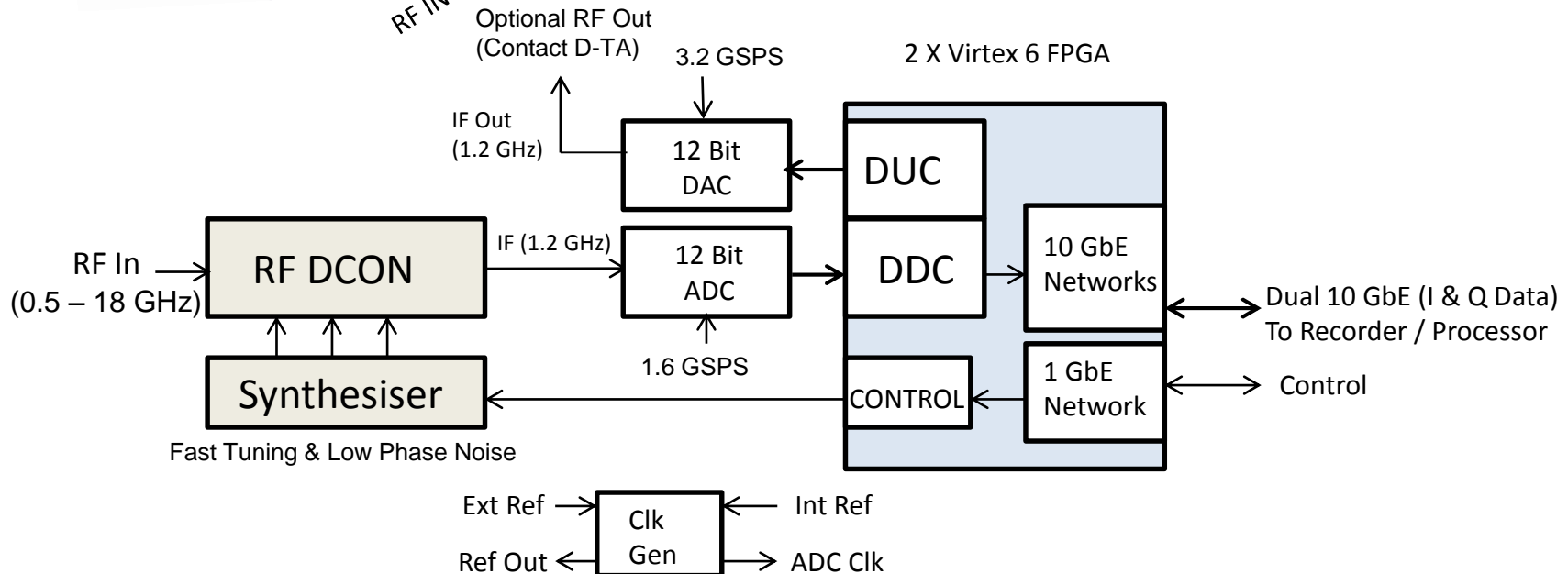
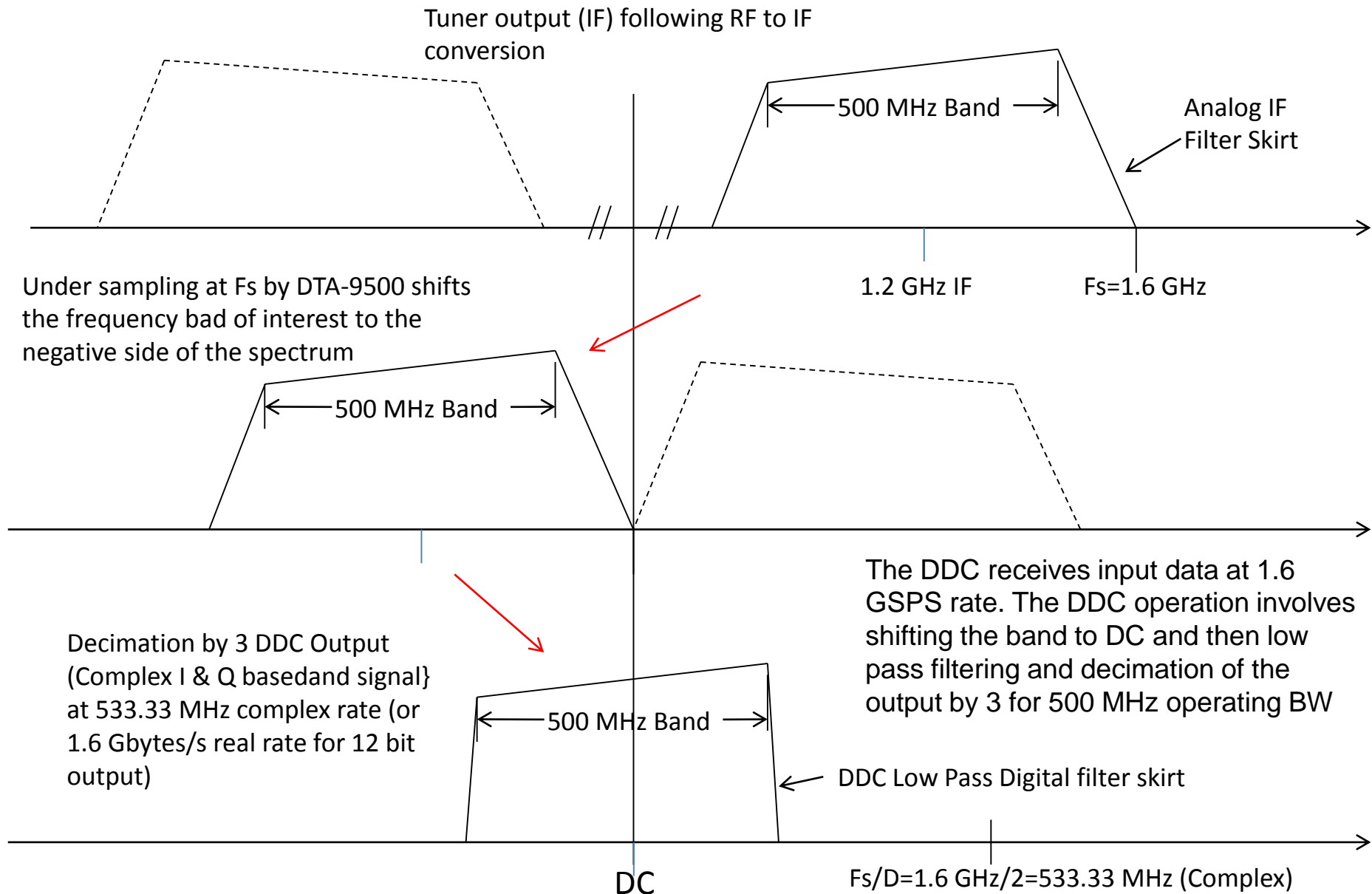


Illustration of Digital Down Conversion (DDC) process by spectral sketches



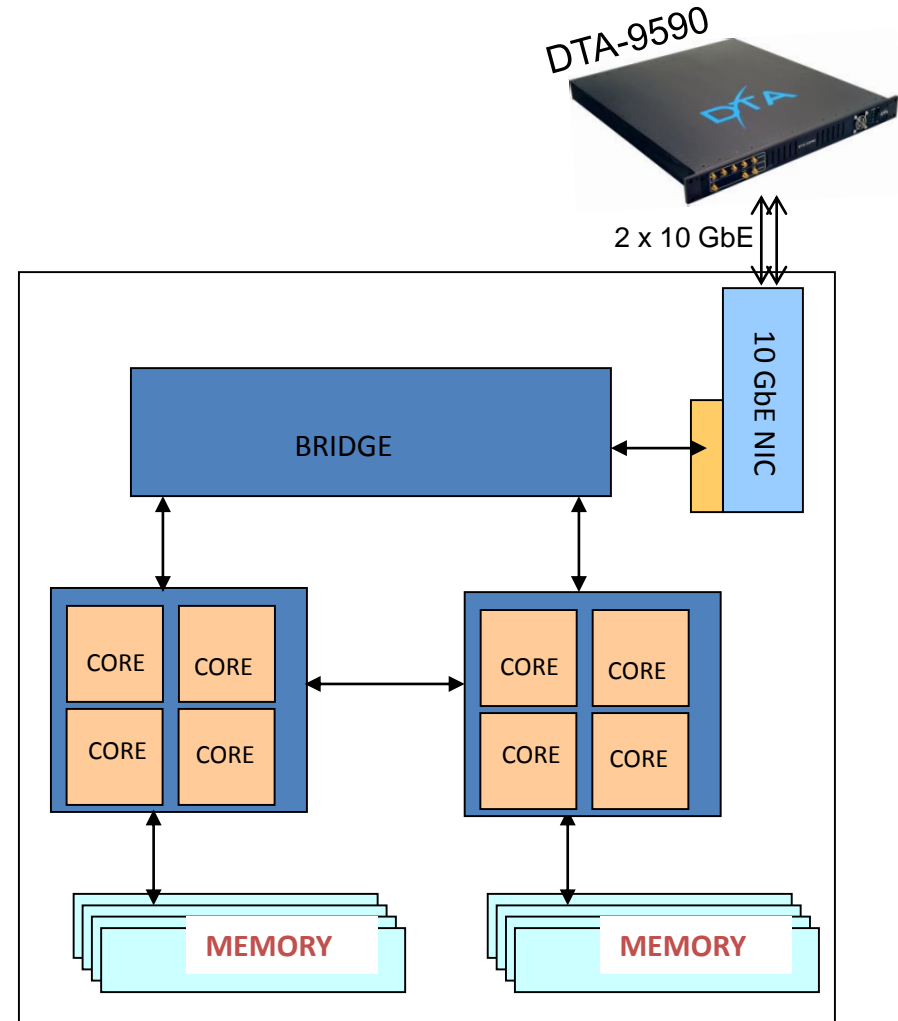
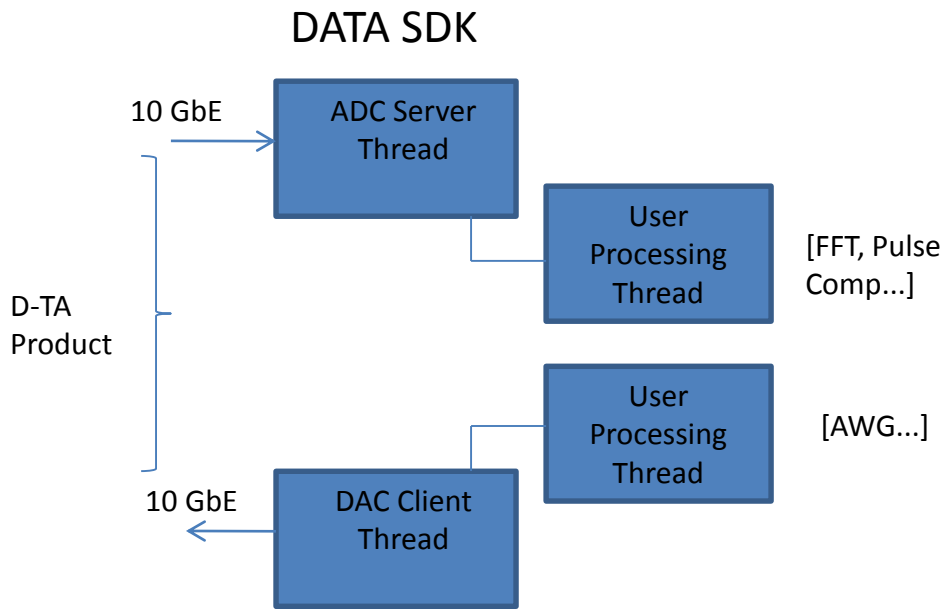
RFVision-2 Major Specifications

Features	Value	Comments
No. of Channels	1 Rx & 1 Tx (Optional)	Contact D-TA for tunable RF Output
Frequency range	500 MHz – 18 GHz	Contact factory for 40 GHz option
Tuning resolution	10 Hz	
Tuning speed	10 us	FPGA based scanning
Instantaneous BW (IBW)	500 MHz	Processing BW is determined by DDC decimation, contact factory for other decimations for lower bandwidth requirements
IF Frequency	1.2 GHz	
Max Receive gain	30 dB	
Receive Gain Control	31 dB in steps of 1 dB	
RF gain Variation	+/- 1.5 dB	
Receive Noise Figure	15 dB max	
Input VSWR	2.5:1	
Max RF Input Level	20 dBm	
Input IP3	-5 dBm @ 20 dB Gain	Typical

Important specifications (Cont'd)

Features	Value	Comments
Input 1 dB compression	-15 dBm	
Receive Image Reject	70 dB	Typical
ADC Resolution	12 bits	The DTA-9500 includes two ADCs
ADC Sample Rate	1.6 GHz	
DAC Resolution	12-Bit	The 4 GSPS DAC is optional.
ADC SFDR	> 63 dB	
DDC Decimation	3	(Other decimations are optional)
Data Transfer	2 X 10 GbE (optical) to DTA-1000-R / 5000	
Control	1 GbE	Optical Fiber
Reference Clock	Internal /External	Internal 100 MHz. External: 100 or 10 MHz
Packaging	1U Rack-mount or portable	

Software Development Support & Training for Real-Time Application Development Using Multi-Core Server Class Computers



D-TA 's full source code based Software Development Kit (SDK) includes Control API for controlling the DTA products and Data API for processing. Real Time Applications (DSP Codes) can be developed as add-on modules to the Base SDK.

D-TA offers Custom Multi-processor and multi-threaded Application Development based on user requirement and also hands on training either at factory or on-site