



MULTIPLY THE VALUE OF YOUR DATA STREAMS

DSP ENGINEERING SERVICES

Companies building next-gen communication systems rely on complex digital signal processing (DSP) systems that transform and filter signals so other applications can respond.

DornerWorks helps those companies unlock the potential of their systems with expert DSP engineering services.



VERSATILE DEVICE EXPERTISE

- Zynq UltraScale+
- RFSoc
- Zynq 7000
- Artix
- Kintex
- Virtex
- RTG4
- ARRIA 10

GROW YOUR BUSINESS WITH CONFIDENCE



You can scramble to develop complex technology and meet market deadlines with a product that doesn't work the way you want it to, or you can rely on the guidance of expert engineers who have been there before, and can bring clarity to your development.

DSP engineering services from DornerWorks will give you the freedom to focus on growing your business.



SIGNAL TRANSLATION

- Transformation
- Filtering
- Windowing
- Radar Signal Processing



SYSTEM MINIATURIZATION

- Reduce the size, weight, and power (SWaP) of your advanced radar systems
- Direct signal conversion with RFSoc technology



SPEED & TIMING

Interface with different devices knowing your data will be processed and fused as needed, when needed.

SCHEDULE A CONSULTATION

DornerWorks.com | **+1.616.245.8369**

“ DornerWorks is a professional, flexible,
**AND AN ESSENTIAL PART
OF OUR TEAM** ”

ADVANCED RF SYSTEMS RFSOC ENGINEERING

A defense contractor wanted to miniaturize the SWaP-C and improve response time of their advanced radar systems that detected and mitigated oncoming airborne threats.

The design DornerWorks delivered was based on one of the first three Xilinx Zynq UltraScale+ RFSoc boards ever available.

The RFSoc system helped the client receive and process data almost instantaneously:

- 12 direct digital synthesis modules drive 12 samples per AXI-Stream to RF data converter DAC
- Costas codes
- Software-controllable

ADC at 4 GSPS with complex output, decimation by 8, with one sample per AXI-stream at 500 MHz from RF data converter

DSP pipeline:

- FIR filter
- Equalizer
- Doppler FFTs
- Data timestamped at detection



CLARITY & CONFIDENCE FOR COMPLEX DEVELOPMENT



Digital signal processing can be complicated, but it doesn't have to slow you down. Contact us about **DSP engineering services** today and replace your worries with confidence!

SCHEDULE A CONSULTATION

DornerWorks.com | +1.616.245.8369