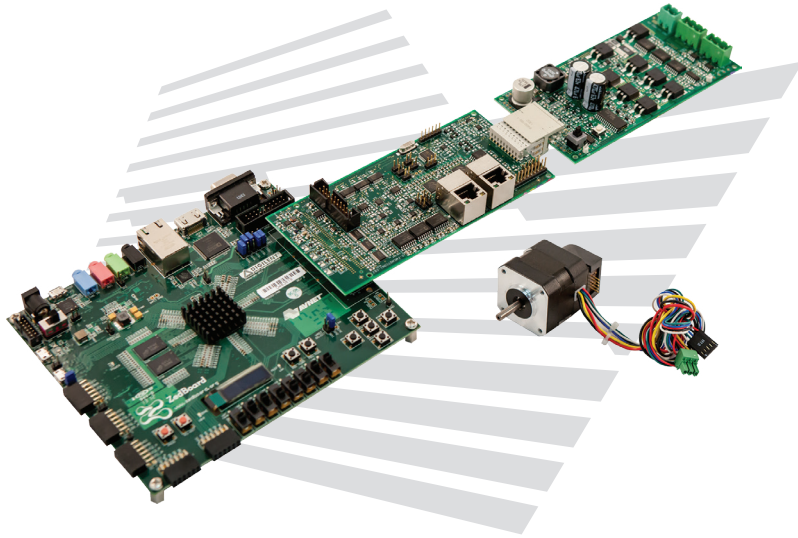


Avnet Product Brief

Xilinx® Zynq®-7000 All Programmable SoC/Analog Devices Intelligent Drives Kit



Combining the Xilinx Zynq®-7000 All Programmable SoC ARM® dual-core Cortex™-A9 + 28 nm programmable logic with the latest generation Analog Devices high-precision data converters and digital isolation, this kit enables high performance motor control and industrial networking connectivity. Also included is a Zynq reference design of Field Oriented Control featuring Analog Devices Linux framework to provide an ideal infrastructure for quickly adding custom control algorithms. Model-Based Design for Zynq is supported using Simulink®, Embedded Coder®, and HDL Coder™ from MathWorks.

Kit Includes

- >> Avnet ZedBoard 7020 baseboard
- >> Xilinx Vivado™ Design Edition voucher
- >> Analog Devices AD-FMCMOTCON1-EBZ Module
- >> 8 GB SD card programmed with application
- >> Linux drivers, applications software, HDL source, reference designs, full schematics and Gerbers
- >> Brushless DC motor: 24 V, 4000 RPM, Hall Sensors and 1250 CPR indexed encoder
- >> MathWorks Motor Control Design Package (optional)
- >> Dynamometer dynamic load to test Zynq motor control performance with interface to MATLAB® (optional)

To purchase this kit, visit www.em.avnet.com/zynq7000idk



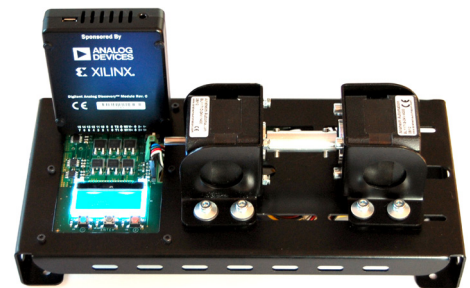
DESIGNED BY AVNET

Features

- >> Analog Devices AD-FMCMOTCON1-EBZ module
- >> Drive BLDC / PMSM / Brushed DC / Stepper motors up to 48 V @ 18 A
- >> AD7401A Isolated 20 MHz Sigma-Delta modulator
- >> AD8251 Programmable Gain Amplifiers for full-scale current measurement
- >> ADuM5000/7640 power and digital signal isolation
- >> Dual Gigabit IEEE1588 Ethernet PHYs for high speed industrial communication
- >> Xilinx XADC interface
- >> Sensored or sensoreless position measurement

Target Applications

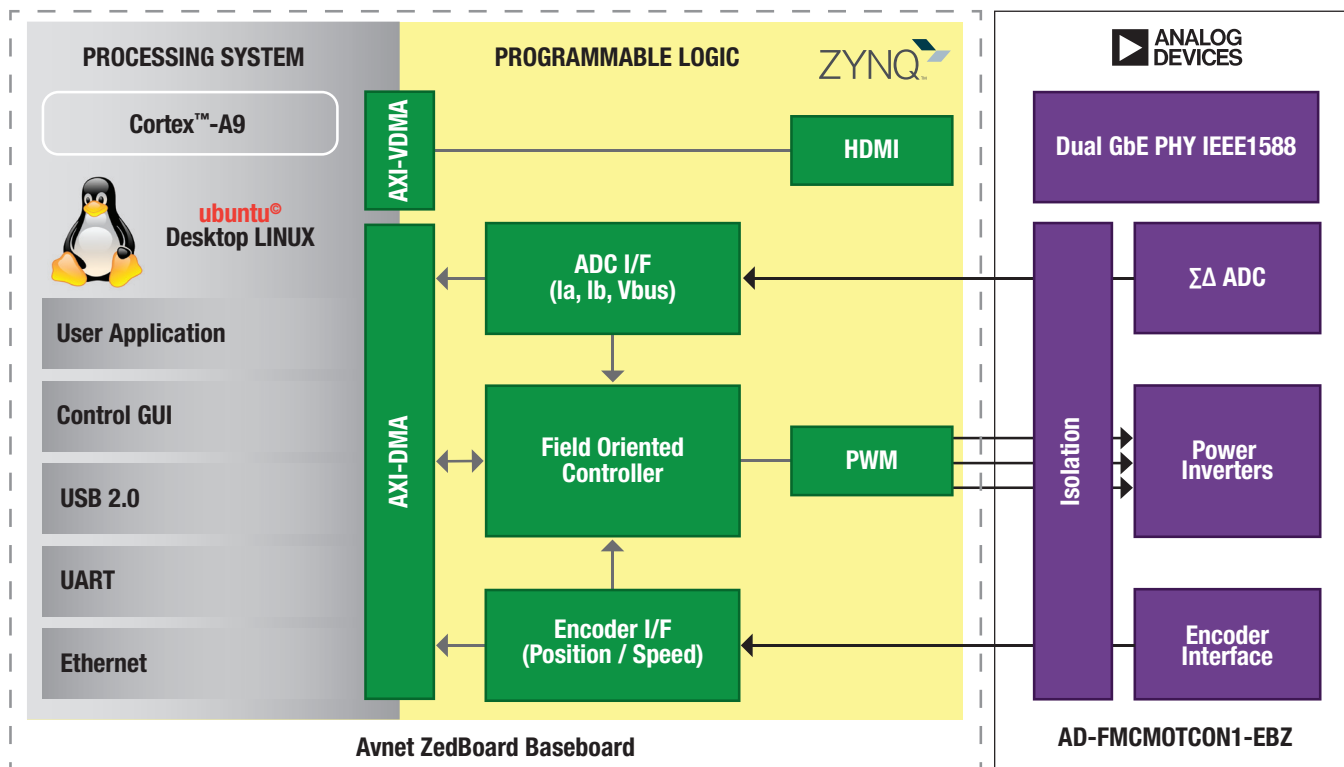
- >> Industrial servos and drives
- >> Manufacturing, assembly, and automation
- >> Medical diagnostic
- >> Surgical assist robotics
- >> Video surveillance and machine vision
- >> Power efficient drives for transportation



Optional Dynamometer Electronic Test Load



Accelerating Your Success™



Featured Manufacturers



Ordering

Part Number	Hardware	Resale
AES-ZIDK-ADI-G	Zynq-7000 AP SoC/Analog Devices Intelligent Drives Kit	\$995 USD
AES-ZIDK-ADI-DYNO-G	Zynq-7000 AP SoC/Analog Devices Intelligent Drives Kit with Dynamometer	\$1,695 USD
AES-ZIDK-ADI-DYNO-G-MATW-ANUL	MathWorks DSP Design Package - Annual License for Zynq Intelligent Drives Kit with Dynamometer	\$19,215 USD
AES-ZIDK-ADI-DYNO-G-MATW-PERP	MathWorks DSP Design Package - Perpetual License for Zynq Intelligent Drives Kit with Dynamometer	\$45,495 USD

To purchase this kit, visit www.em.avnet.com/zynq7000idk

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