SmartFusion Motor Control Development Kit
Quickstart Guide

Microsemi's Motor Control Development Kit (MCDK) offers a simple way to try Microsemi SmartFusion™ products in multi-axis motor control applications. SmartFusion FPGAs are the world's only FPGAs with a hard ARM® Cortex™-M3 processor and programmable analog as well as on-chip flash and SRAM memory. The board can drive up to four (4) motors with hall sensors and encoders. It can communicate via Ethernet, USB, CAN, and EtherCAT. The board also contains various voltage and current monitoring functions for analog experimentation on the board.

Kit Contents – Included in Box

Quantity	Description
1	MCDK main unit • MCDK Control Board (on top) • MCDK Driver Board (inside) • MCDK Chassis
1 with production kit (4 for demo kit)	Motor with Hall sensors and encoders
1	FlashPro4 JTAG programmer
1	Power cord
1	World travel plug
1	18 V DC power supply with international adapters
1	Cross-over cable

Kit Contents – Online

www.actel.com/products/hardware/devkits_boards/smartfusion_motorcontrol.aspx

• Motor Control Quickstart Guide: http://www.actel.com/documents/A2F_MOTORCONTROL_QS.pdf

• Motor Control User's Guide: http://www.actel.com/documents/MCDK_UG.pdf

• Board level schematics: http://www.actel.com/download/rsc/?f=MCDK_SCH

Both source and compiled code are provided for the following:

• MCDK FPGA Design

• MCDK Firmware

• MCDK Visual Interface

Design files are provided only to customers who purchase the kit or the designs standalone. To receive the files, please contact Rajiv.Nema@microsemi.com with the unit serial number.

Technical Support and Contacts

Technical support is available online at www.actel.com/support, by email at soc_tech@microsemi.com, or by phone:

Phone (NA): 800.262.1060

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Microsemi SoC Sales offices, including Representatives and Distributors, are located worldwide. To find your local representative, go to www.actel.com/company/contact.