

# Stellaris<sup>®</sup> MDL-LM3S818CNCD

## Motor controlCARD for 3-Phase Brushless DC (BLDC)

The MDL-LM3S818CNCD is a Texas Instruments (TI) motor controlCARD module designed to operate with TI's DRV83xx baseboards. It can be purchased with a DRV8312 baseboard as part of the DK-LM3S-DRV8312 development kit to spin three-phase brushless DC (BLDC) motors using TI's InstaSPIN<sup>™</sup> motor control solution included on this kit's CD.

The Stellaris LM3S818 microcontroller (MCU) on the MDL-LM3S818CNCD controlCARD is preprogrammed with the necessary firmware in its Flash memory to run a simple application for verification of operation and can also be reprogrammed by the customer to operate with other compatible baseboards to control other motors or end-customer applications.

The Stellaris LM3S818-based controlCARD module can be used with other baseboards provided by TI:

- DRV8312 Rev C and Rev D
- DRV8301HC (High Current 60A) Rev A and DRV8301 (6A) Kit



### Contents

The LM3S818 controlCARD module kit contains:

- MDL-LM3S818CNCD controlCARD module (Stellaris LM3S818-based controlCARD DIMM form-factor module)
  - On-board Stellaris In-Circuit Debug Interface (ICDI)
- Cables/Accessories
  - USB-miniB to USB-A plug cable (for debug and serial communication)
  - 1/2-inch blue jumper wires (for bridging power)
- DK-LM3S-DRV8312 kit CD
  - Documentation
  - LM Flash programmer utility for firmware updates
  - Crosshairs GUI for monitor and control
  - Applicable source code
  - Schematics
- TI's Code Composer Studio<sup>™</sup> Integrated Development Environment (IDE)

### Ordering information

Product Number	Description
MDL-LM3S818CNCD	Stellaris LM3S818 controlCARD Module for 3-Phase BLDC motors in single-unit packaging
DK-LM3S-DRV8312	3-Phase BLDC Motor Kit with DRV8312 and Stellaris MCU

### Features

The MDL-LM3S818CNCD controlCARD feature set includes:

- Stellaris 50-MHz ARM<sup>®</sup> Cortex<sup>™</sup>-M3 LM3S818 microcontroller
- Pluggable 100-pin DIMM form factor
- Hardware-compatible with other TI DRV baseboards
- Auto-isolation enabling upon debug connection

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### Applications

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