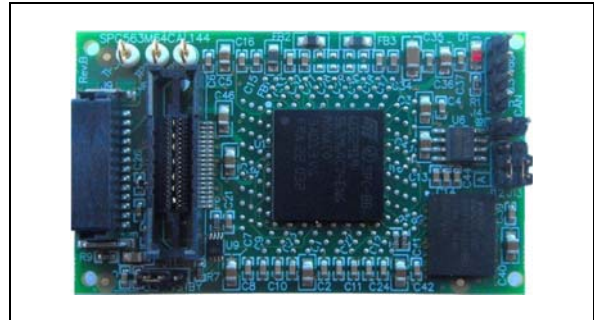# SPC563M64CAL144/176

SPC563M64CALxx microcontroller family calibration and emulation system

Data brief

Features

- Support for LQFP144 and LQFP176 MCU production packages allowing calibration systems to be built without requiring modifications to the standard production system housing

- 2MByte static RAM organized as 1024K words by 16 bits

- On-board latch providing a 16-bit de-multiplexed bus interface from the SPC563M64 16-bit multiplexed calibration interface;

- Support for Nexus-based debug tools even if application PCB does not include Nexus connector

- Nexus functionality with 12 Message Data Out (MDO) signals

- Support for full-feature calibration tools via availability of comprehensive set of device signals available on the connectors.

- ERNI 154819 connector optimized for calibration

- High speed CAN transceiver with signals protection

- Specifications:
  - Board Size 36 x 61.8 mm
  - Target connector compatible with TQPACK144SD and TQPACK176SD sockets

Description

The SPC563M64CALxx is a calibration and emulation system supporting the STMicroelectronics® SPC563Mxx family of automotive microprocessors.

The Calibration Adapter is designed to substitute the QFP device on an ECU version during engine calibration.

The complete system consists of a SPC563M64CAL144/176 board and a POLYPOD-TQ144/176 Poly-Pod which plugs directly into the motherboard.

The Calibration Adapter can also be used as emulation board as the Nexus trace port on CSP496 allows using the pins for application purpose.

1 Order codes

Table 1. **Device summary**

Order code	Reference
SPC563M64CAL144	Calibration System for SPC563M64 mcu in QFP144 target package
SPC563M64CAL176	Calibration System for SPC563M64 mcu in QFP176 target package
POLYPOD-TQ144	TQ-PolyPod socket for QFP144 targets
POLYPOD-TQ176	TQ-PolyPod socket for QFP176 targets

2 System requirements

- Windows PC (XP, Vista, 7)

3 Calibration software

- Green Hills MULTI
- Wind River diab
- Cosmic C Compiler
- Raisonance RLink

4 Calibration software

- ETAS INCA

5 Revision history

Table 2. Document revision history

Date	Revision	Changes
12-Sep-2012	1	Initial release.
17-Sep-2013	2	Updated disclaimer.