

## SPC563Mxx 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
- VertiCal interconnect standard supported by multiple calibration tool developers, ensuring maximum flexibility in tool choice.
- 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 VertiCal connector.
- Allows system calibration without impacting standard MCU I/O resources.
- Allows system calibration regardless of availability of standard MCU external bus.
- Specifications:
  - Board Size 30 x 40.5mm
  - Target connector compatible with TQPACK144SD and TQPACK176SD sockets



### Description

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

All VertiCal hardware is designed to support a standardized tool connector, allowing a variety of calibration and debug hardware to be connected and reused.

VertiCal components are available to support a wide range of SPC563M64 devices in various package types.

The complete system consists of a SPC563M64AVB144/176 board, a calibration RAM board SPC56XVTOP-M and a POLYPOD-TQ144/176 Poly-Pod which plugs directly into the motherboard.

# 1 Order codes

**Table 1. Device summary**

Part number	Reference
SPC563M64AVB144	Calibration System for SPC563M64 mcu in QFP144 target package.
SPC563M64AVB176	Calibration System for SPC563M64 mcu in QFP176 target package.
POLYPOD-TQ144	TQ-PolyPod for QFP144 targets.
POLYPOD-TQ176	TQ-PolyPod for QFP176 targets.
SPC56xVTOP-M	RAM/Debug Top Board for SPC563M64 Vertical Base boards.

## 2 System requirements

- Windows PC (XP, Vista, 7)

### 3 Calibration software

- ETAS INCA

## 4 Revision history

**Table 2. Document revision history**

<b>Date</b>	<b>Revision</b>	<b>Changes</b>
19-July-2012	1	Initial release.
10-Sep-2012	2	Updated feature list on cover page.
13-Sep-2013	3	Updated disclaimer.