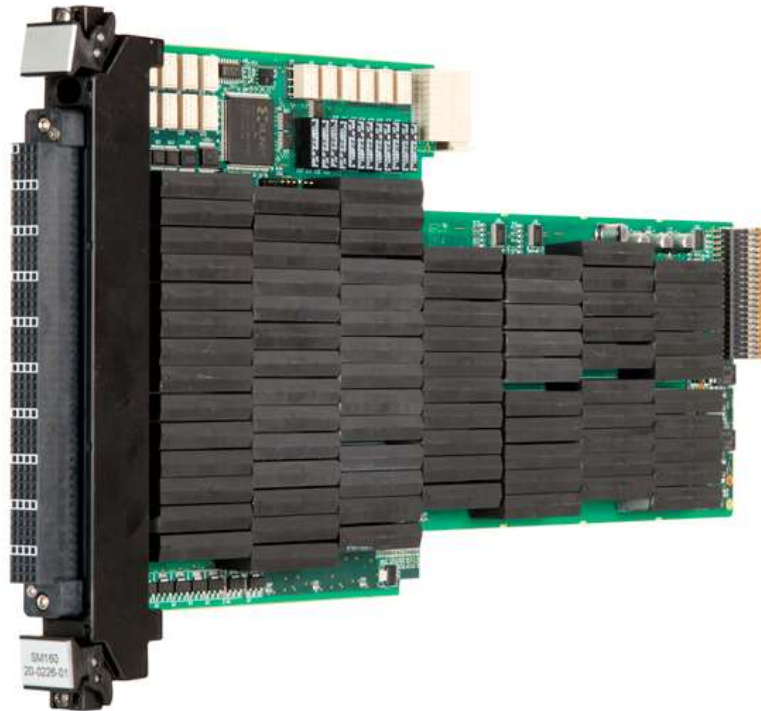


# GT-SM160

High-density matrix switching module



## Technical data sheet

### Features

- In-Circuit-Test and Functional Test
- 160 test points
- 2 x 4:1 Relay-Multiplexer
- 8 Photo-MOS switches
- 8 Open-Drain switches to GND
- Access to the analogue measuring bus
- Integrated self-test capability (with DMM)

# GT-SM160

## High-density matrix switching module

### Functional description

The SM160 module can be used in the VXTS test system GT4000. It allows universal interconnection of measuring points and measuring devices via the global, analog measuring bus of the basic device.

Typical applications are product testing in the fields of communications, automotive electronics or general industrial electronics, especially for the in-circuit test with a high number of channels.

Analog ICT measurements are possible in combination with the Rohde & Schwarz modules TS-PSAM, TS-PICT and TS-PSU.

The module is controlled via the Extended Measurement Bus (XMB) and has the form factor optimized specially for measurement tasks.

A relay matrix connects the channels of the front connector to a local bus, which can be connected to the global, analog measuring bus of the basic unit via coupling relays.

Two separate two-pole relay-multiplexers are available for connecting external measuring devices or sensitive measuring signals. The two poles can be connected to each other via half-wire relays. These are usually used for the self-test and as potential-free switches in the functional test.

Open-drain control channels enable universal control of additional components in test adapters. They are also frequently used in functional testing to connect GND-related loads.

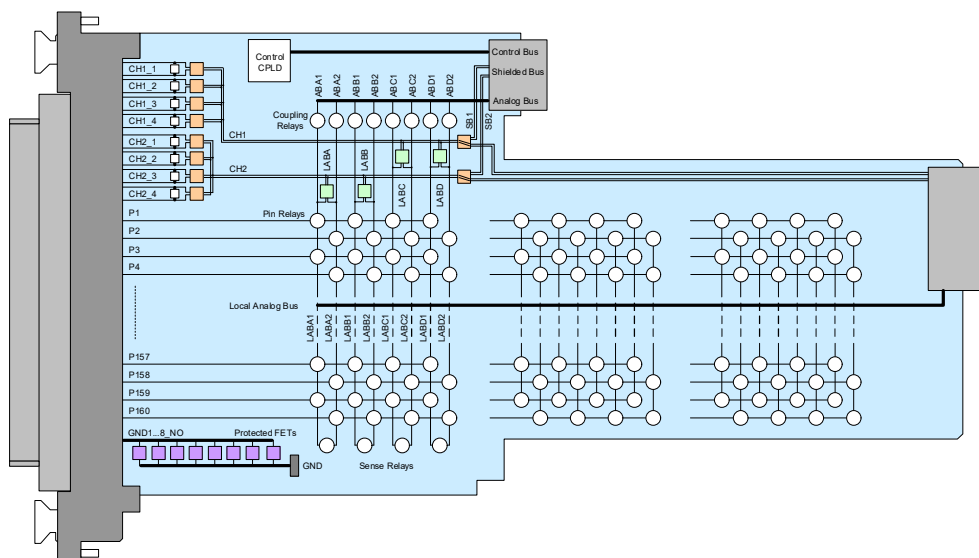


Figure 1: Block diagram

# GT-SM160

High-density matrix switching module

## Technical data

Interfaces		
Platform	VXTS test systems	GT4000
	Space requirement	1 slot
	Control bus	VXTS XMB
Plug connector	Adapter interface	Virginia Panel QP192
	Backplane XMB	CompactPCI, type C
	Backplane PXI (J2)	CompactPCI, type AB22
Switching units		
Relay matrix	Configuration	160 channels on 2x4 buses
	Connection Local Analog Bus	8x analog bus
	Switching time, incl. bouncing	0.5 ms
	Switching capacity DC	Maximum: 125 V   1 A   10 W
Multiplex unit	Configuration	2x 4:1 DPDT
	Connection Local Analog Bus	Rear I/O, Shielded Bus, Local Analog Bus
	Switching time, incl. bouncing	3 ms
	Switching capacity DC	Maximum: 50 V   2 A   60 W
Potential-free switches	Configuration	8x SPST PhotoMOS (P-N per MUX-channel)
	Switching time, incl. bouncing	5 ms
	Switching capacity DC	Maximum: 50 V   2 A   60 W
GND switch	Configuration	8x Open-Drain, fully protected
	Switching capacity DC	Maximum: 42 V   3 A
General data		
Module	Energy consumption	+5V, typ. 205mA (16 TPs switched)
	Dimension	340 x 196 x 20 mm
	Weight	1.48 kg

# GT-SM160

High-density matrix switching module



## Order information

Designation	Type	Order number
Matrix switching module	SM160	20-0226-01