LANGER E1 Set Immunity Development System Installation Guide

Contents

LANGER
EMV-Technik

LANGER E1 Set Immunity Development System

Short description

The E1 is a set of EMC tools used for EMI suppression in printed circuit boards during the development phase. The developer can use the E1 set to quickly identify the causes ofburst and ESD interference. This allows the developer to design suitable measures to solve the causes of the interference. It can also be used to test the effectiveness ofthe measures taken. The E1 test set-up is small and fits easily on a developer's desk. The E1 set user manual describes EMC mechanisms and provides detailed descriptions of basic measuring strategies for interference suppression in printed circuit boards. The E1 set includes a generator to generate burst and ESD disturbances.

Scope of delivery

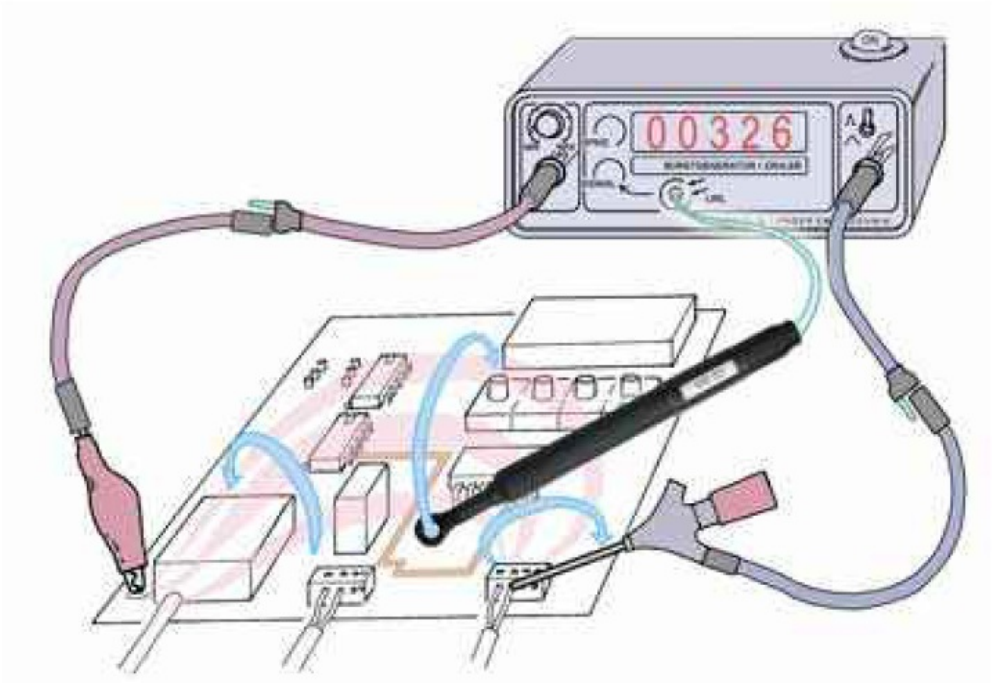
- 1x SGZ 21, Burst Generator
- 1x BS 02, Magnetic Field Source
- 1x BS 05D, Magnetic Field Source
- 1x ES 00, E-Field Source
- 1x ES 02, E-Field Source
- 1x ES 08D, E-Field Source
- 1x E1 acc, Accessories
- 1x E1 case, System Case
- 1x S21, Optical Sensor (10 Mbps)
- 1x BS 04DB, Magnetic Field Source
- 1x BS 05DU, Magnetic Field Source
- 1x ES 01, E-Field Source
- 1x ES 05D, E-Field Source

- 1x MS 02, Magnetic Field Probe
- 1x NT FRI EU, Power Supply Unit
- 1x E1 m, E1 Set User Manual

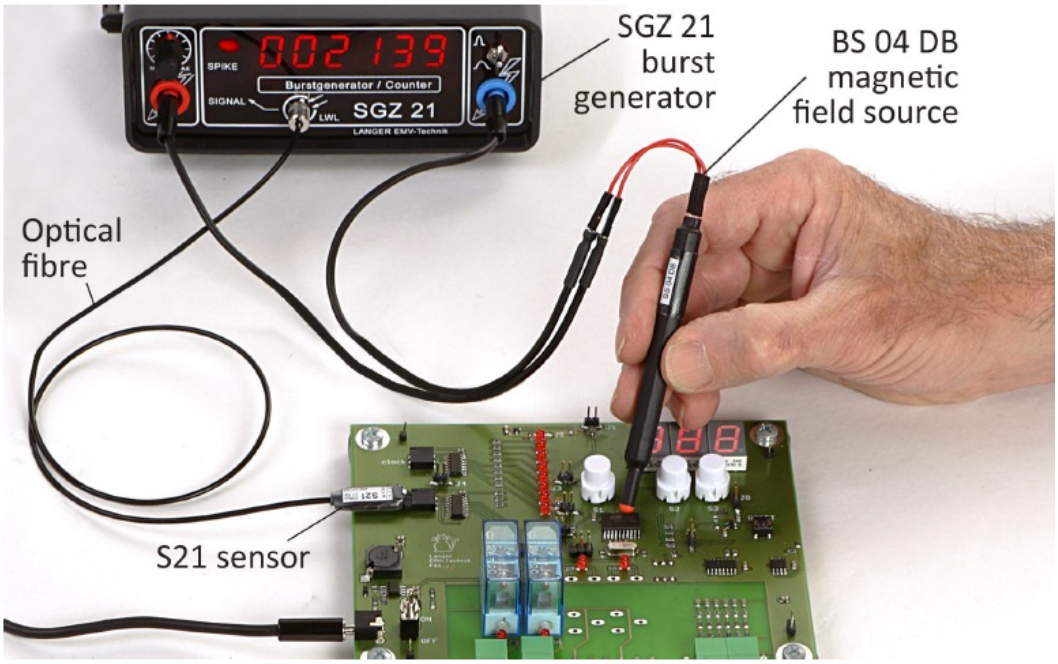
Technical parameters

S21 optical sensor	
Transmission range	DC…10 Mbps
Optical fibre connector	2.2 mm Ø
Supply voltage	(3-5) V
Current input	10 mA
SGZ 21 burst Generator	
Pulse parameter	
Rise time	ca. 2 ns
Tail time	ca. 10 ns
Peak values	ca. 0…1500 V
Optical input	
Optical fiber	2.2 mm
Max. frequency	5 MHz
Min. pulse width	100 ns
Supply voltage	12 V / 200 mA
Sizes (L x W x H)	(154 x 100 x 62) mm

Measuring principles

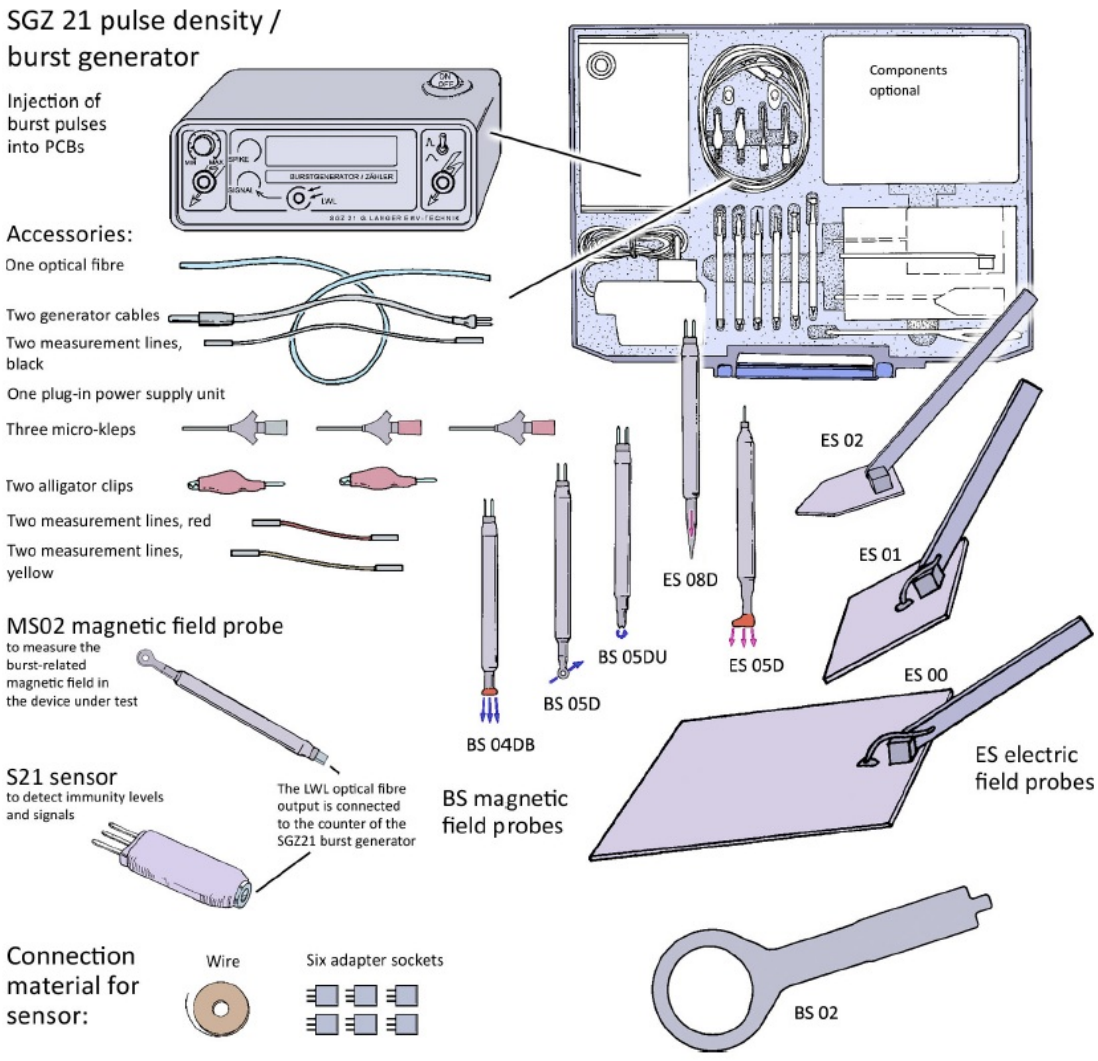


Application with BS 04 DB

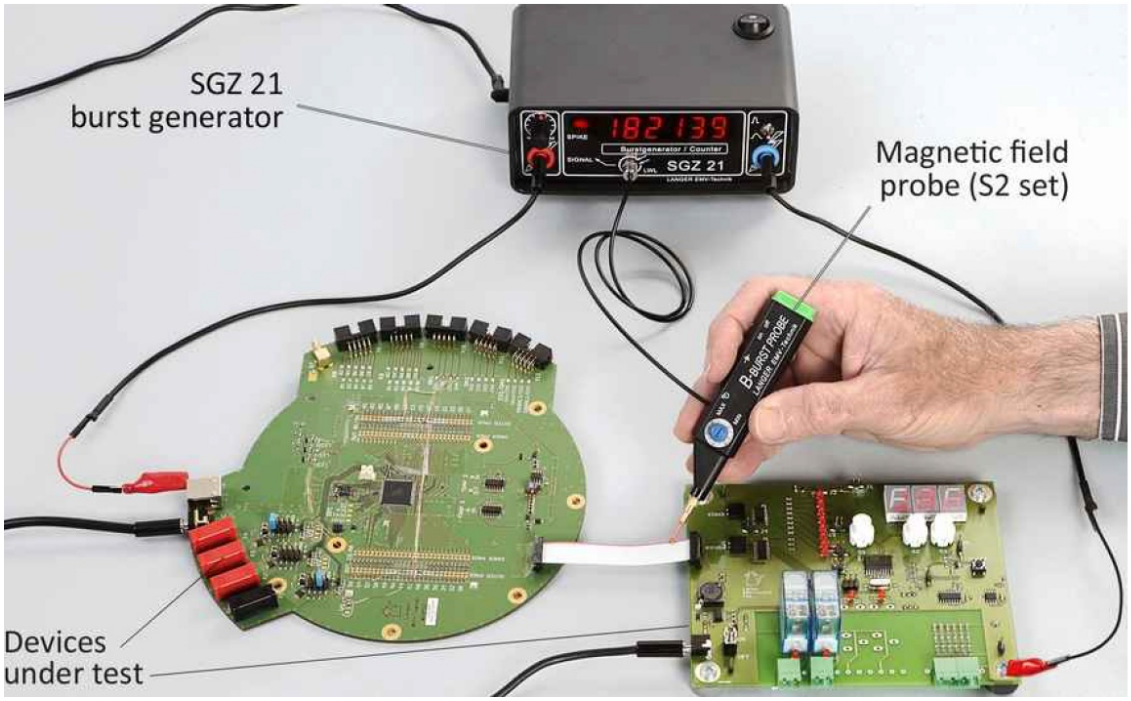


Scope of delivery E1

Exploded view drawing E1



Application with MSA 02 magnetic field probe from the S2 set



Langer EMV-Technik GmbH
www.langer-emv.com
+49 351 430093 0
sales@langer-emv.de

Documents / Resources

	LANGER E1 Set Immunity Development System [pdf] Installation Guide SGZ 21, BS 02, BS 05D, ES 00, ES 02, ES 08D, S21, BS 04DB, BS 05DU, ES 01, ES 05D, MS 02, NT FRI EU, E1 Set Immunity Development System, E1 Set, Immunity Development System, Development System

References

- emv.de
- Langer EMV
- Langer EMV
- User Manual