ICI 03 L-EFT set

IC EM Pulse Injection Langer Pulse

Short description

The ICI 03 L-EFT set consists of three different ICI sources emitting electric, magnetic field and current pulses. This allows high precision and very high resolution IC analysis and body bias injection. These sources allow side channel analysis e.g. to test security-critical circuits. Special features include very high resolution probe tips (allowing for the testing of extremely small areas) and a very low trigger to pulse jitter (allowing for the disruption of very specific points in the program sequence).

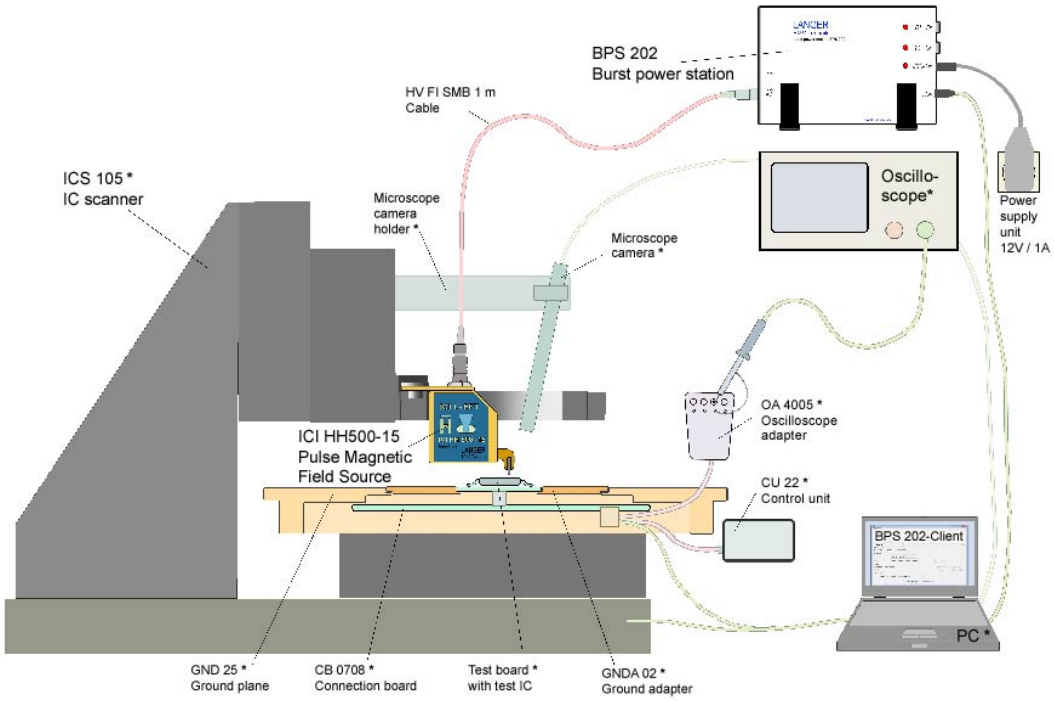
Scope of delivery

1x ICI HH500-15 L-EFT, Pulse Magnetic Field Source
1x ICI E450 L-EFT, Pulse E-Field Source
1x ICI I900 L-EFT, Pulse Current Source (FBBI)
1x BPS 202, Burst Power Station
1x BPS 202-Client, BPS 202-Client Software / USB
1x NT Ex EU, Power Supply Unit
1x ICI 01 L-EFT acc, Accessories
1x ICI case, System Case
1x ICI m, ICI Set User Manual

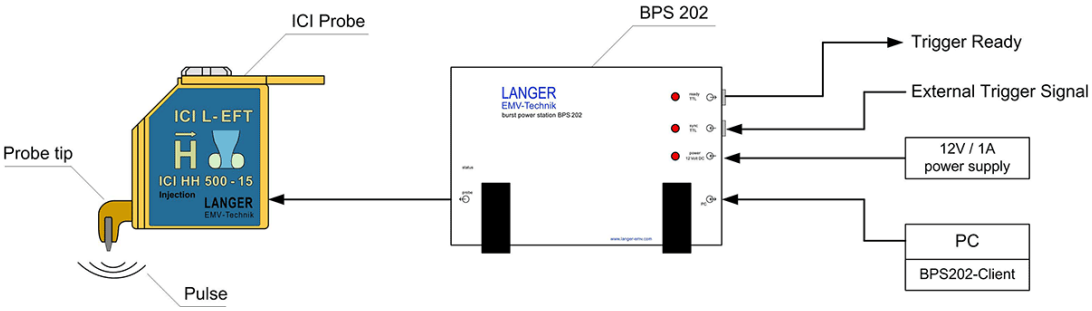
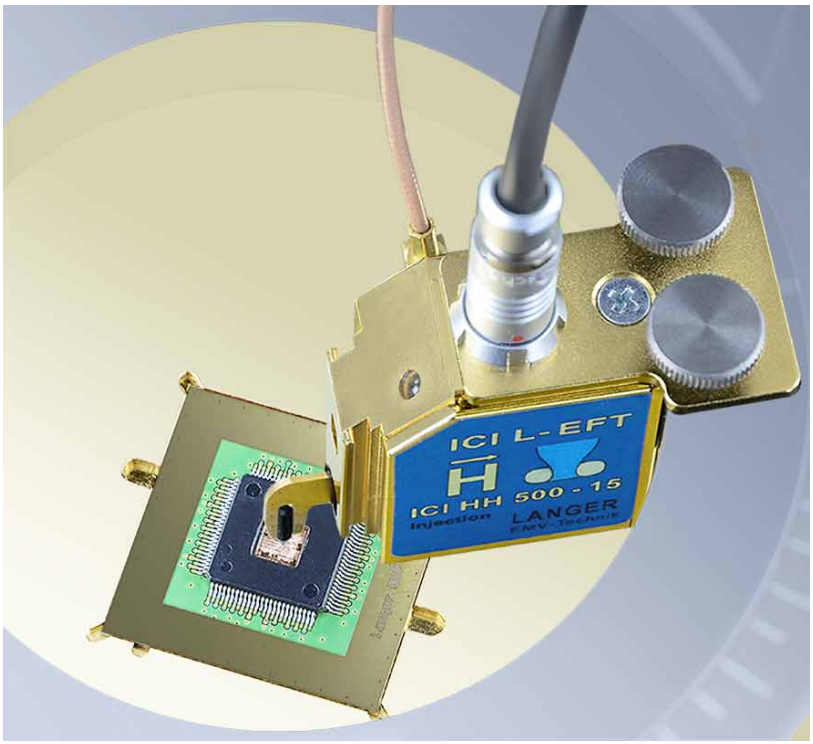
Technical parameters

Pulse parameter	
Rise time	< 2 ns
Repetition frequency	0.1 Hz - 20 kHz
Polarity (set by software)	+ / - / alternating
Trigger-pulse delay (Bypass Mode - Delay Line)	
min. Trigger-pulse delay (typ.)	100 ns
max. Trigger-pulse delay (typ.)	450 ns
max. Jitter (typ.)	± 1 ns
Trigger-pulse delay (Timer Mode)	
min. Trigger-pulse delay (typ.)	200 ns
max. Trigger-pulse delay (typ.)	100 ms
max. Jitter (typ.)	± 15 ns
Trigger delay, min. increment	10 ns
Supply voltage	BPS 202
Software	BPS 202-Client / DLL (32 Bit / 64 Bit) Win XP SP3 or higher

Schematic set-up with ICI HH500-15 pulse magnetic field source (the devices marked with * are not included in the scope of delivery)



Schema of measurement set-up



ICI probe in application