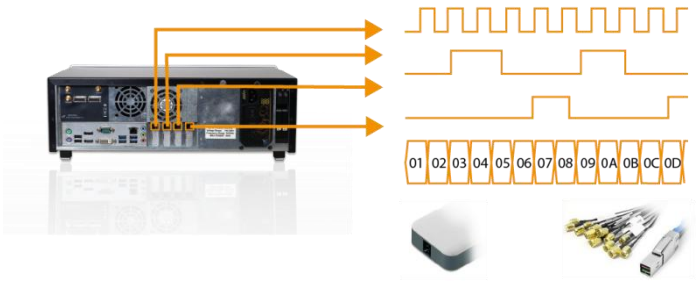
DIGITAL PATTERN GENERATORS – DPG



Active Technologies Digital Pattern Generators also known as DPG, allow digital stimuli generation to stimulate digital designs, providing the capability to emulate standard serial or parallel bus transactions or custom digital interfaces, for system or device debugging and characterization.

These Digital Pattern Generators can be used for FPGA / peripheral / ASIC emulation and stimulation, protocol-level testing setup/hold verification, production test, mixed-signal testing, and general digital stimulus.

Active Technologies instruments integrate analog waveform and digital pattern generation in a single solution to meet demanding for test signals and application where speed, resolution and quality is an issue.

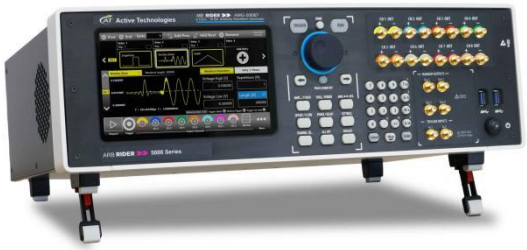
Up to 32 digital channels @ 1.54 GSps per instrument support different electrical standards like LVDS or LV-TTL.

To ensure the best signal integrity when transmitting such high-speed digital signals, a customized digital cable and the corresponding connector Mini SAS HD to 16 SMA connector (Active Technologies item code: AT-LVDS-SMA8) can be bought from Active Technologies.

Moreover, Active Technologies developed an 8-bit LVDS to LVTTL converter (Active Technologies item code: AT-DTLL8) that can be used to convert LVDS differential signals to LVTTL single-ended signals with a software programmable voltage level from 0.8V to 3.8V.

The AT-DTLL8 probe bit rate is 125 Mbps@0.8V and 400 Mbps@3.6V.

Arb Rider AWG-4000 and AWG-5000



LVDS output standard

MODEL	NO. OF CH	OUTPUT IMPEDANCE	OUTPUT TYPE	MAXIMUM UPDATE RATE
AWG-5062	8	100 Ω differential	LVDS	1.54 Gbps
AWG-5064	8 / 16	100 Ω differential	LVDS	1.54 Gbps
AWG-5068	8 / 16 / 32	100 Ω differential	LVDS	1.54 Gbps
AWG-4012	8	100 Ω differential	LVDS	1.2 Gbps
AWG-4014	8 / 16	100 Ω differential	LVDS	1.2 Gbps
AWG-4018	8 / 16 / 32	100 Ω differential	LVDS	1.2 Gbps

LVTTL output standard (by AT-DTLL8 adapter)

MODEL	NO. OF CH.	OUTPUT IMPEDANCE	OUTPUT TYPE	MAXIMUM UPDATE RATE
AWG-5062	8	50 Ω single ended	LVTTL	125 Mbps@0.8V and 400 Mbps@3.6V
AWG-5064	8 / 16	50 Ω single ended	LVTTL	125 Mbps@0.8V and 400 Mbps@3.6V
AWG-5068	8 / 16 / 32	50 Ω single ended	LVTTL	125 Mbps@0.8V and 400 Mbps@3.6V
AWG-4012	8	50 Ω single ended	LVTTL	125 Mbps@0.8V and 400 Mbps@3.6V
AWG-4014	8 / 16	50 Ω single ended	LVTTL	125 Mbps@0.8V and 400 Mbps@3.6V
AWG-4018	8 / 16 / 32	50 Ω single ended	LVTTL	125 Mbps@0.8V and 400 Mbps@3.6V

Learn more about AWG-4000

Learn more about AWG-5000

AWG 1102 / 1104

LVTTL Converter Probe

Learn more about AWG-1102 / 1104

MODEL	NO. OF CH	MEMORY DEPTH	GENERATION SAMPLE RATE	OUTPUT VOLTAGE	MODE
AWG-1102D	18	1 Mpts/ch	125 MS/s	0.8V to 3.8V programmable in groups of 8 bits	18 Digital Channels or 2 Analog Channels
AWG-1104D	18/36	1 Mpts/ch	125 MS/s	0.8V to 3.8V programmable in groups of 8 bits	36 Digital Channels or 4 Analog Channels / 18 Digital Channels or 2 Analog Channels