

LA3000 series

Model	LA3068E	LA3136E	LA3068B	LA3136B
Power Source	12V Power adapter			
Power				
Static Power Consumption	18W	30W	18W	30W
Max Power Consumption	45W	75W	45W	75W
Hardware Interface	USB 3.0			
Timing Analysis (Asynchronous, Max. Sample Rate)	2.4 GHz			
State Clock Rate (Synchronous, External Clock)	250 MHz			
Storage	Conventional Timing, Transitional Timing			
Channels (Data / Clock)	64 / 4	128 / 8	64/4	128/8
Total Sample Memory	32Gb			
Available channels vs. Memory per channel	Vailable channels (Conventional / Transitional Timing) - Memory per channel			
Timing Analysis	2.4 / 2 GHz (32 / 28) - 1Gb			
1 GHz	(64 / 56) - 500Mb			
500 / 250 / 200 MHz	(64 / 64) - 500Mb	(128 / 128) - 250Mb	(64 / 64) - 500Mb	(128 / 128) - 250Mb
Resolution	416 ps			
Channels	64	128	64	128
Pre / Post Trigger	Yes			
Pass Count	Yes (1 ~ 1000000 times)			
Event Types	Channel, Pattern, Single / Multi Level, Width, Time-out, External			
Bus Triggers I	I ² C, SPI, UART, USB PD 3.0			
Bus Triggers II	---	BiSS-C, CAN 2.0B/CAN FD, DALI, eMMC5.0, eSPI, I ² S, HID over I ² C, I3C, LIN2.2, MDIO, MIPI SPMI 2, Modbus, NAND Flash, PMBus, Profibus, SD3.0, Serial Flash, SMBus, SVID ³ , UART, USB1.1		
Input (for Stack)	TTL 3.3V			
Output Port (for Stack)	TTL 3.3V			
Ref. Clock Input	10MHz, Vpp=3.3 to 5V			
Threshold	-0.5V~4.5V			
Resolution	0.1V			
Accuracy	+/- 20mV			
Input Voltage	+/- 15V			
Sensitivity	~300mV			
Impedance	1M 5pF			
Temperature Operating / Storage	5°C~45°C (41°F~113°F)/-10°C~65°C (14°F~149°F)			
Channel to channel skew	< 500 ps			
Protocol Analyzer/ Protocol Logger / Protocol Monitor	I ² C, SPI, UART, USB PD 3.0			
Zoom In / Out	Yes			
Languages	English / Traditional Chinese / Simplified Chinese			
Waveform Height	Adjustable			
Zoom / Report Window	Yes			
Quick Cursor-positioning	Yes			
Import Label(s)	Yes			
Quick Bus Decode Setup	Yes			
Trigger / Auxiliary cursors	1/25			
Software Features	1-Wire, 3-Wire, 7-Segment, A/D Mux Flash, AccMeter, ADC, APML, AVSBus, BiSS-C, BSD, BT1120, CAN 2.0B/FD, Close Caption, CODEC_SSI, DALI, DMX512, DP AUX ¹ , EDID, eMMC 5.1/MMC, eSPI, FlexRay, HD Audio, HDLC, HDQ, HID over I ² C, I ² C, I ² C EEPROM, I ² S (PCM, TDM), I3C, I80, IDE, IrDA, ITU-R BT.656 (CCIR656), JTAG, JVC IR, LCD1602, LED_Ctrl, LIN 2.2, Line Decoding, Line Encoding, Lissajous, LPC, LPT, Math, M-Bus, MDDI, MDIO, MHL CBUS, Microwire, MII (RGMII), MIPI CSI, MIPI DSI LP, MIPI RFFE, MIPI SPMI 2.0, Modbus, NAND Flash, NEC IR, PECE, PMBus, Profibus, PS/2, PWM, QEI, QI, RC-5, RC-6, RGB Interface, S/PDIF, SD 3.0 (SDIO), Serial Flash, Serial IRQ, SGPIO, Smart Card, SMBus (SBS, SPD), SMI, SPI, SPI-NAND, SSI, ST7669, SVI2, SVID ² , SWD, SWIM, SWP, UART, UNI/O, USB 1.1, USB PD 3.0, Wiegand, ...			
Line Decoding	Biphase Mark, Differential-Manchester, Manchester (Thomas, IEEE802.3), Miller, Modified Miller, NRZI, ...			
Line Encoding	AMI (Standard, B8ZS, HDB3), Biphase Mark, CMI, Differential-Manchester, Manchester (Thomas, IEEE802.4), MLT-3, Miller, Modified Miller, NRZI, Pseudoternary, ...			
Dimension L x W x H (mm ³)	270 x 175 x 55			
Weight Device / Accessories	800g / 1500g			
Lead Cable (LA-Pod / Flying lead cable)	2 / 8	4 / 16	2 / 8	4 / 16
Grippers	80	160	80	160

¹ Optional DP AUX adapter needed.

² Upon request ONLY by users who have signed CNDA with Intel, SVID decode supported by all LA3000 models.

³ Upon request ONLY by users who have signed CNDA with Intel, SVID trigger & PA supported by LA3068B/LA3136B ONLY.

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LA3000 series logic analyzer

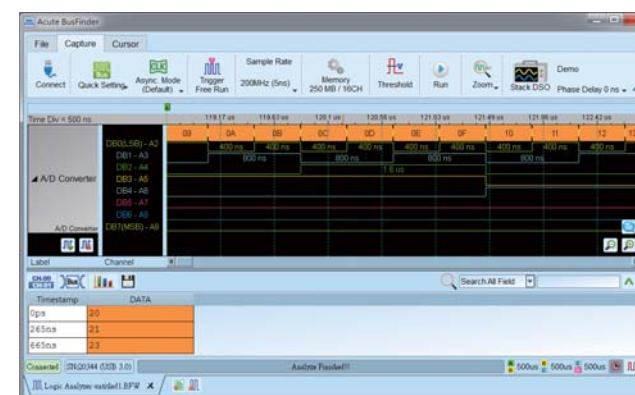


270 x 175 x 55 (mm³)

- PC-based
- 68 / 136 channels
- USB 3.0 interface, 12V power adaptor
- 2.4GHz Timing Analysis / 250MHz State Analysis
- 32Gb Memory
- Active Probe
- Logic, State, Protocol triggers
- Stackable with a DSO to form an MSO
- Bus Decode : CAN 2.0B/CAN FD, DP_Aux¹, eMMC 5.1, I²C, I3C, Profibus, SD 3.0, SPI, SVID², SWD, UART, USB1.1, USB PD 3.0... (90+)
- Bus Trigger I : I²C, SPI, UART, USB PD 3.0
- Bus Trigger II : eMMC 5.0, eSPI, I²S, I3C, NAND Flash, SD 3.0, Serial Flash, SVID³, ...
- Protocol Analyzer I : I²C, SPI, UART, USB PD 3.0
- Protocol Analyzer II : BiSS-C, CAN 2.0B/CAN FD, DALI, eSPI, I²S, I3C, LIN 2.2, PWM, SVID³, ...

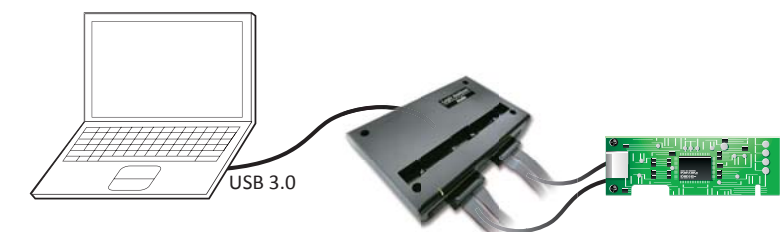
Model	Channel	Bus Trigger	Protocol Analyzer	Cascade for more channels
LA3068E	68	I	I	-
LA3136E	136	I	I	YES
LA3068B	68	I, II	I, II	-
LA3136B	136	I, II	I, II	YES

Software Window



System Requirements

- USB 3.0 port
- Win 7, Win 8, Win 10 (64 bit)
- PC RAM 16GB (recommended) or 8GB at least



Protocol Analyzer:

It is hardware decoding, may log protocol data very long time if without waveforms.
Application timing: Preliminary protocol debug.

Support multiple protocols with different operating modes

Real-time data search

Stack with a DSO as an MSO in logic analyzer mode

Show waveforms with bus decodes



Protocol Analyzer

Show real-time protocol data
Application timing: massive protocol data with some idles in between



Protocol Logger

Like data logger, save massive data into SSD hard drive
Application timing: massive protocol data



Protocol Monitor

Like dash cameras, record protocol data by the device's memory only
Application timing: trigger event only happens in very long time

Packing List :



Software and Manual Download links at: <http://www.acute.com.tw>

Logic Analyzer:

Capture digital waveforms and support bus decodes.
Able to stack with a DSO to form as an MSO.

Flow chart bus triggers :

Quick View

Right-click and drag on the clock waveform to see the frequency and the number of transitions

Display digital and analog waveforms at the same phase

Report window

Measurement Type	Label Name A	Label Name B	From	To	Minimum	Maximum	Average
Period Time	BUS_I2C		Begin	End	10ns	57.895us	24.719us
Frequency	BUS_I2C		Begin	End	100MHz	17.273KHz	40.454KHz
Cycle Count	BUS_I2C		Begin	End	---	---	6627
Positive Pulse Count	BUS_I2C		Begin	End	---	---	6628

Measurement Statistics Tab
Quick measurement and statistics for selected channels.