TravelLogic series

Model		TL2136B	TL2236B	TL2236B+
Power	Power Source	USB bus-power (+5V)		
	Static Power Dissipation	0.75W		
	Max Power Dissipation	<2.5W		
Hardware Interface		USB2.0 (USB1.1 Compatible)		
Timing Analysis (Asynchronous, Max. Sample Rate)		4 GHz		
State Clock Rate (synchronous, External Clock)		200 MHz		
Transitional Storage		Multi channel (55 bits at 5 ns resolution/5.7 years duration)		
Qualified Storage		Only supports Transitional Storage		
Channels (Signal/Ground)		36/4		
Total Sample Memory		18M bits	72M bits	
Memory (bits) per channel vs. number of channels available	Timing Analysis	Memory (bits) per channel/number of channels available		
	4 GHz	2.5K/36		
	2 GHz	5K/36		
	1.6 GHz	4M/4	16M/4	
	800 MHz	2M/9	8M/9	
	400 MHz	1M/18	4M/18	
	200 MHz	512K/36, 1M/18 1.5M/12, 2M/9 3M/6, 4.5M/4 9M/2, 18M/1	2M/36, 4M/18, 6M/12, 8M/9, 12M/6, 18M/4, 36M/2, 72M/1	
	Resolution	250ps		
Trigger	Channels	36		
	Conditions	Yes (4)		
	Levels for each Condition	Yes (16)		
	Pre/Post Trigger Setting	Yes		
	Pass Counter	Yes (0 ~ 1048575 times)		
	Event Types	Word, Channel, Transition, Glitch, Width, Comparison, Time-out		
	Bus Trigger I	CAN, I²C, I²S, LPC, SMBus, SPI, SVI2, SVID, UART, USB1.1, ...		
	Bus Trigger II	eMMC 4.5, eSPI, MIPI SPMI, NAND Flash, SD 3.0, Serial Flash (SPI NAND), ...(TL2236B+ Only)		
	Input Port (for Stack)	TTL 3.3V		
	Output Port (for Stack)	TTL 3.3V		
Threshold	Range	+6V ~ -6V		
	Resolution	50mV		
	Accuracy	±100mV + 5%*Vth		
	Schmitt Trigger	Yes (Dual Threshold Mode)		
Input Voltage	Maximum	±40V DC, 15Vpp AC		
	Sensitivity	0.25Vpp @50MHz, 0.5Vpp @150MHz, 0.8Vpp @250MHz		
Impedance		200KΩ// <5pF		
Temperature	Operating/Storage Temperature	5°C ~ 45°C (41°F ~ 113°F)/-10°C ~ 65°C (14°F ~ 149°F)		
Channel to channel skew		< 1ns		
Software Features	Zoom In/Out	Yes		
	Languages	English / Traditional Chinese / Simplified Chinese		
	Waveform Height	Adjustable		
	Zoom Window/Report Window	Yes		
	Quick Cursor-positioning	Yes		
	Import Label(s)	Yes		
	Quick Bus Decode Setup	Yes		
	Trigger cursor/Auxiliary cursors	1/25		
	Data Logger	Saved to Hard Disk		
	Bus Decode I	1-Wire, 3-Wire, 7-Segment, A/D Mux Flash, AccMeter, ADC, APML, Biss-C, CAN, Close Caption, CEC, DALI, DMX512, DP-Aux, EDID, eSPI, FlexRay, Line Decoding, Line Encoding, HD Audio, HDQ, HID over I²C, I²C, I²C EEPROM, I²S, I80, IDE, ITU656, IrDA, JTAG, LCD1602, LIN, Lissajous, LPC, LPT, M-Bus, Math, MDIO, MHL-CBus, Microwire, MII, MIPI DSI, MIPI SPMI, MMC(eMMC5.0), Modbus, Nand Flash, NEC IR, PECI, PMBus, ProfiBus, PS/2, PWM, QI, RC-5, RC-6, SDIO(SD3.0), Serial Flash, Serial IRQ, SGPIO, Smart Card, SMBus, SMI, S/PDIF, SPI, SPI-NAND, SSI, ST7669, SWD, SWP, SVI2, SVID, UART, UNI/O, USB 1.1, Wiegand, ...		
	Bus Decode II	MIPI DSI-HS, ... (For TL2236B+ Only, Signal source: Other brand DSO or LA, not TravelLogic)		
	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, IEEE802.3), MLT-3, Miller, Modified Miller, NRZI, Pseudoternary, ...		
Dimension	Length x Width x Height (mm³)	123 x 76 x 21 (mm³)		
Lead Cable		A 40-pin lead cable (36 Signal + 4 Ground)		
Grippers		40		

Acute
PC-based T&M Instruments
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2014.10

Acute

TravelLogic logic analyzer

123 x 76 x 21 mm³

- PC-based
- USB2.0 interface / powered
- 36 channels
- 4 GHz timing / 200 MHz state analysis
- 4-conditions (4 levels each) trigger
- Data Logger (HD storage)
- Input Sensitivity 0.25Vpp
- Qualified Storage
- Transitional Storage (8 channel mode can be used to store data for 4 hours)
- Stackable with Acute or other brand DSO to form an MSO
- Bus Trigger I : CAN, I²C, I²S, LPC, SMBus, SPI, SVI2, SVID, UART, USB1.1, ...
- Bus Trigger II : eMMC 4.5, eSPI, MIPI SPMI, NAND Flash, SD 3.0, Serial Flash (SPI NAND), ...
- Bus Decode I : BiSS-C, CAN, eMMC5.0, I²C, I²S, Nand Flash, ProfiBus, SD, SPI, SVID, UART, USB1.1, ... (70+ decodes)
- Bus Decode II : MIPI DSI-HS, ...

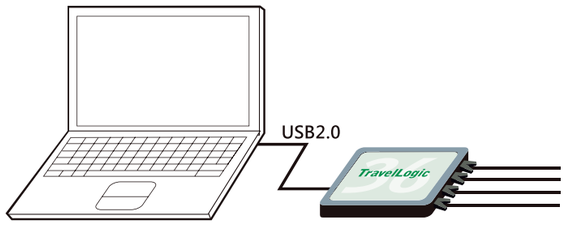
(Signal source: Other brand DSO or LA, not TravelLogic)

Model	Memory	Bus Trigger	Bus Decode
TL2136B	18 Mb	I	I
TL2236B	72 Mb	I	I
TL2236B+	72 Mb	I, II	I, II

Software Window

System Requirements

- USB 2.0 port
- XP, Vista, Win 7, Win 8 (32 / 64 bits)



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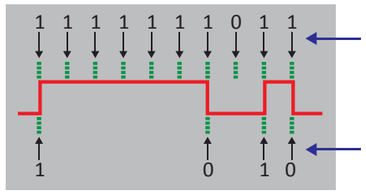
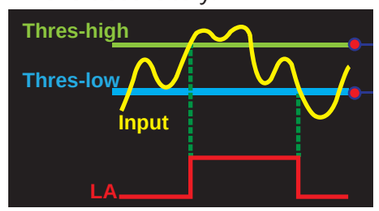
• Use the Transitional Data Storage to capture longer time data.



• Standard Storage mode: 10 points

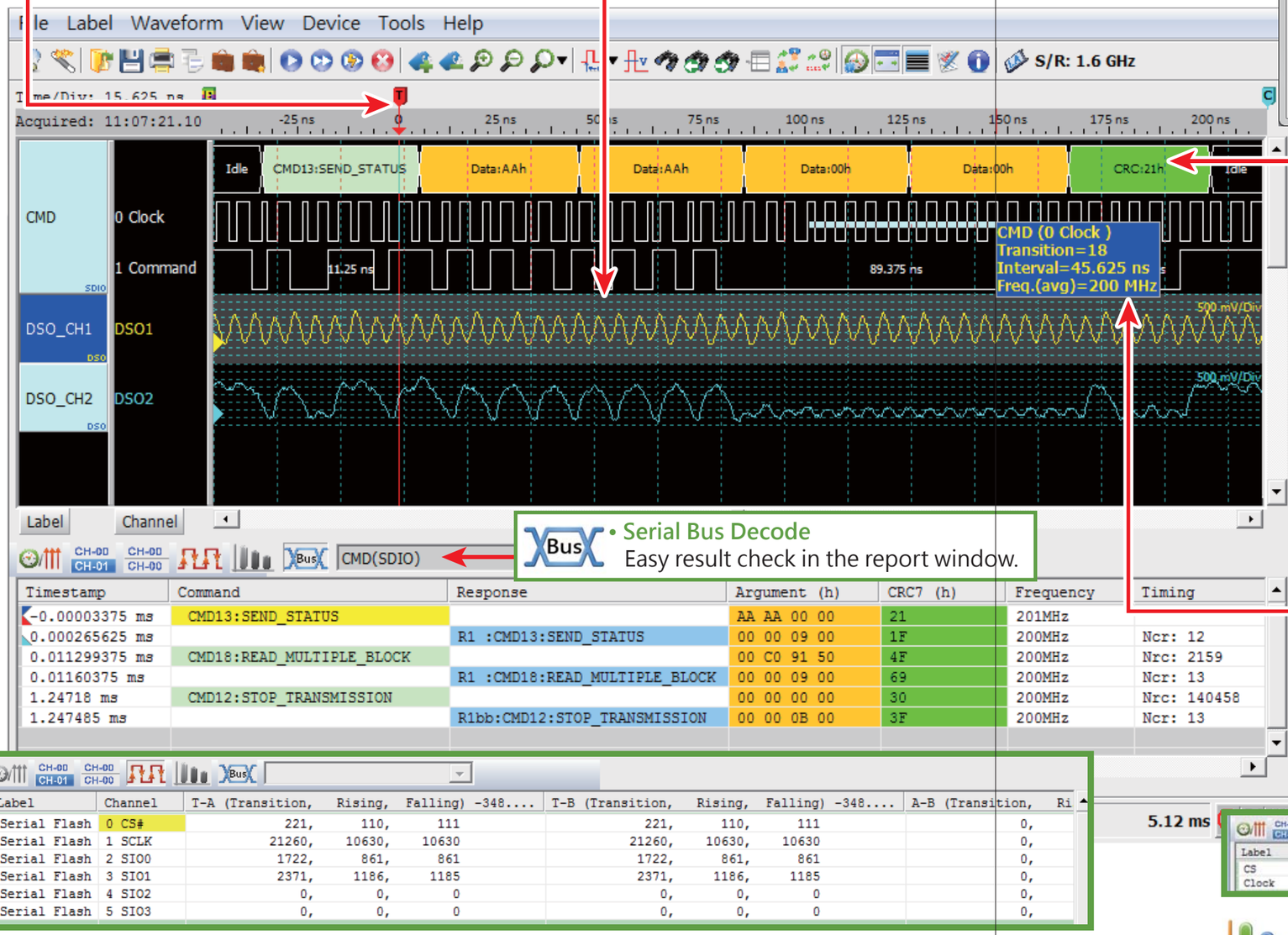
• Transitional Storage mode: 4 points

• Provide 2 voltage thresholds (Schmitt Trigger)
Measure the slow-transition signal more accurately.



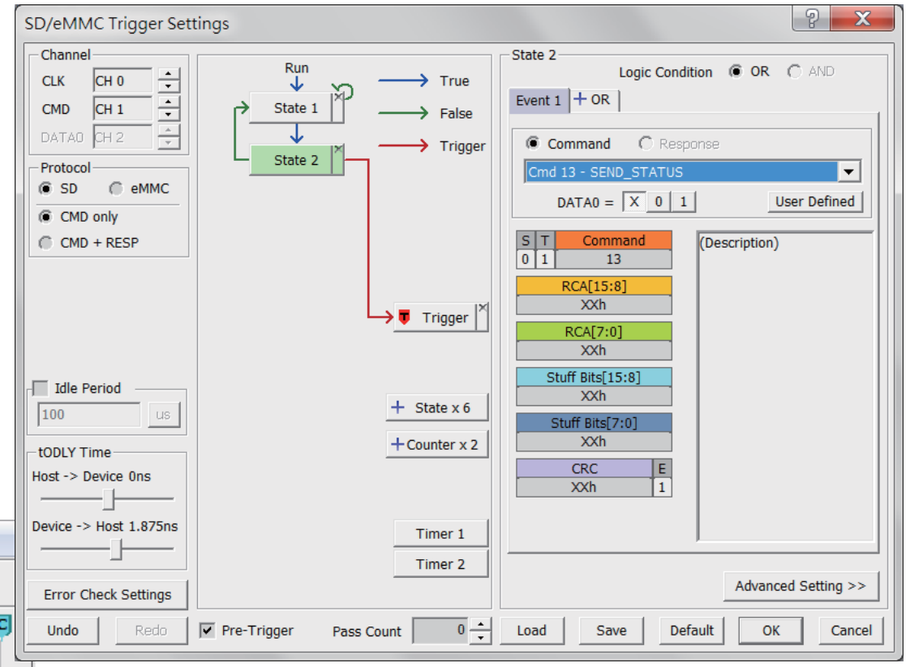
• More than 10 serial bus triggers
Capture the designated command/data of CAN, eSPI, eMMC4.5, I²C, MIPI SPMI, NAND Flash, SD3.0, Serial Flash, SPI, SVID, UART, ...

• Stack a DSO to form an MSO to see both analog and digital waveforms on the same timing phase.
Stackable DSOs: Acute, Agilent, HAMEG, LeCroy, Tektronix, ...

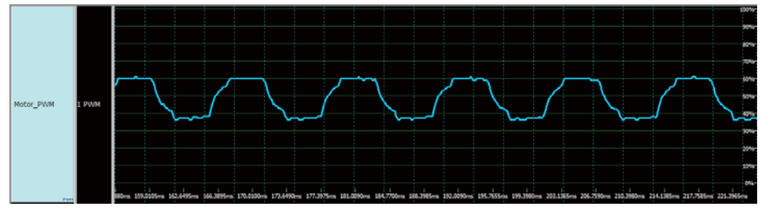


• Serial Bus Decode
Easy result check in the report window.

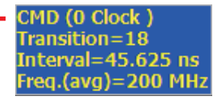
• Data Transitions Counter Tab
Transition/Rising/Falling edge counter for all displayed channels.



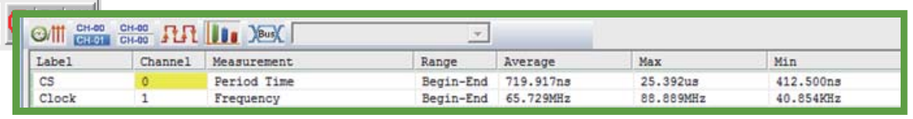
• 70+ free serial bus decodes
CAN, eSPI, eMMC5.0, I²C, MIPI SPMI, NAND Flash, SD3.0, SPI, Serial Flash, SVID, UART, ...



• PWM analysis
Display the PWM data as percentile or the original frequency waveform.



• Quick View Function
Right-click and drag on the waveform to see the signal frequency and transitions.



• Waveform Measurement and Statistics Tab
Quick measurement and statistics for selected channels.