

低速バス向け TravelBus TB2000シリーズを改版したTB3000シリーズ。下位のTB3016FでもI2C,I3C,SPI,UARTを強力にサポートするほかロジアナモードでは70種類のバスデコードができます。最上位のTB3016BではCAN-FD,RS485の専用差動入力や外部トリガ入出力に加え20種類以上のバストリガをサポートします。TB2000から強化された部分を青で囲っています。TB2000は今後もサポートし、まだ供給も可能です。

Acute TravelBus Logic Analyzer & Protocol Analyzer

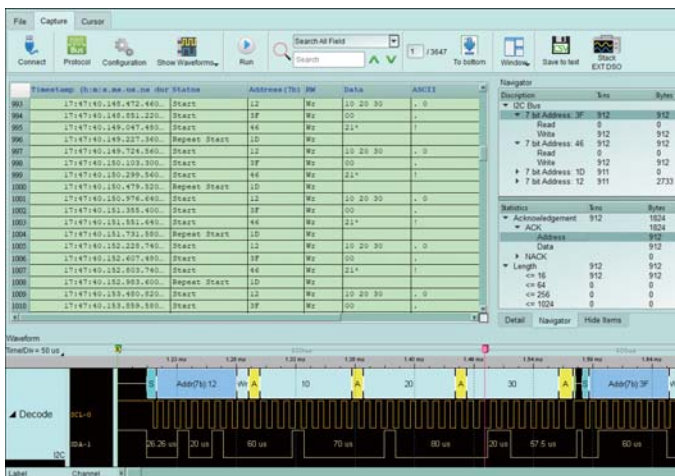


96 x 74 x 24 mm³

- PC-based, USB 3.0 interface/powered
- 800 MHz* timing/ 200 MHz* state analysis
- Digital channels : 16 (Data), 1 (Clock), 2 (I²C/DP_Aux)
- Memory : PC RAM
- Real time data display and post-capture waveform display
- Bus Decode : CAN FD, DALI2.0, DP_Aux, I²C, I²S, LIN2.2, PMBus, PWM, SMBus, SPI, **MIPI I3C 1.1**, UART, USB PD 3, ...(70+ decodes)
- Module I (全機種 TB3016F, TB3016E, TB3016B)
Protocol Analyzer : I²C, **MIPI I3C 1.1**, SPI, UART (RS232)
- Module II (TB3016E, TB3016B)
Protocol Analyzer : HID over I²C, I²S, LIN2.2, MDIO, PMBus, SMBus, USB1.1
- Module III (TB3016B)
 - Protocol Analyzer : BiSS-C, CAN2.0B, CAN-FD, DALI2.0, DP_Aux, Profibus, RS485, ...
 - Differential channels : 2 (CAN2.0B/CAN-FD), 4 (RS422/485)
 - Stackable with Acute TravelScope DSO to form an MSO
 - Isolated Ground : CAN2.0B/CAN-FD, RS485 (Safety Isolation > 1000Vrms)

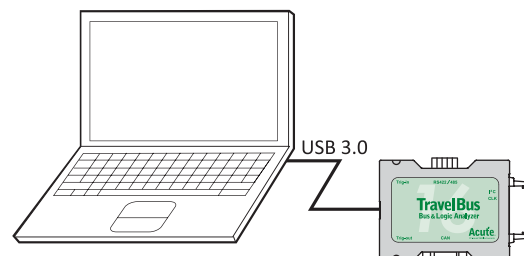
Model	Channels	Module	Bus Decode	DSO stack
TB3016F	19	I	YES	No
TB3016E	19	I, II	YES	No
TB3016B	25	I, II, III	YES	Yes

Software Window



System Requirements

- USB 3.0 port
- Win 7, Win 10, Win11 (64 bit)



立野電脳 (株) はAcute Technologyの国内正規代理店です。
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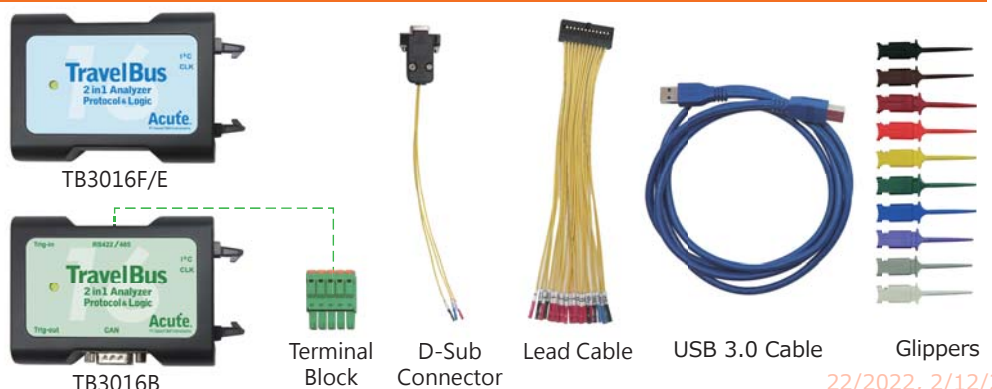
TravelBus series		TB3016F	TB3016E	TB3016B
Power	Power Source	USB bus-power (+5V)		
	Static Power Dissipation	0.75W		
	Max Power Dissipation	< 2.5W		
Hardware Interface		USB 3.0		
Timing Analysis (Asynchronous, Max. Sample Rate)		800 MHz*		
State Clock Rate (Synchronous, External Clock)		200 MHz*		
Channels (Data / CLK / I ² C; DP_Aux / CAN / RS485)		16 / 1 / 2 / - / -		16 / 1 / 2 / 2 / 4
Timing vs. Channels	Timing Analysis	Available channels		
	800 MHz	8		
	400 MHz	16		
Threshold	200 MHz	16		
	Group	2 (ch0~7, ch8~15 & clk0)		
	Range	±6V (この範囲の低電圧I/O、例えば0.9Vにも対応)		
	Resolution	50mV		
Trigger (ロジアナモードで設定できる各種トリガ)	Accuracy	±100mV + 5%*Vth		
	Resolution	5 ns		
	Channels	16 (Max.)		
	Pre/Post Trigger Setting	Yes		
	Pass Counter	Yes (0 ~ 65536 times)		
	Event Types	Channel, Pattern, Single, Width, Time-out, External		
	Module I	I ² C, MIPI I3C 1.1, SPI, UART (RS232)		
	Module II	---	HID over I ² C, I ² S, LIN2.2, MDIO, PMBus, SMBus, USB1.1	
	Module III	---	BiSS-C, CAN2.0B, CAN-FD, DALI2.0, DP_Aux, SENT, Modbus, Profibus, RS422, RS485, USB PD 3	
	Input port (for Stack)	---	TTL 3.3V	
Input Voltage	Output port (for Stack)	---	TTL 3.3V	
	Maximum	±40V DC, 15Vpp AC		
Impedance	Sensitivity	0.5Vpp @150MHz		
	Maximum target signal speed	200KΩ // <5pF		
Temperature	Operating / Storage	Data Port: 14 MHz, CAN Port: 10 Mbps, I ² C Port: 400 KHz 3.3V, RS485 Port: Baud rate 20 Mbps		
	Protocol Analyzer	5°C ~ 45°C (41°F ~ 113°F) / -10°C ~ 65°C (-14°F ~ 149°F)		
Software features	Module I	I ² C, MIPI I3C 1.1, SPI, UART (RS232)		
	Module II	---	HID over I ² C, I ² S, LIN2.2, MDIO, PMBus, SMBus, USB1.1	
	Module III	---	BiSS-C, CAN2.0B, CAN-FD, DALI2.0, DP_Aux, Modbus, Profibus, PWM, RS422, RS485, USB PD 3	
(ロジアナモードでキャプチャ停止後デコードできる70種類超のプロトコル)		1-Wire, 3-Wire, 7-Segment, AccMeter, ADC, APML, BiSS-C, BSD, CAN2.0, CAN FD, Close Caption, CODEC_SSI, DALI2.0, Digital LED, DMX512, DP_Aux, EDID, FlexRay, HDLC, HDQ, HID over I ² C, I ² C, I ² C EEPROM, I ² S, ITU656, IrDA, JTAG, JVC IR, LCD1602, LIN2.2, Line Decoding, Line Encoding, LPT, M-Bus, Math, MDIO, MHL Cbus, Microwire, Mini/Micro LED, MIPI CSI LP, MIPI DSI LP, MIPI I3C 1.1, MIPI SoundWire, Modbus, NEC IR, PECL, PMBus, Profibus, PS/2, PWM, QEI, QI, RC-5, RC-6, RT_SWI, SDQ, SENT, SGPIO, Smart Card (ISO7816), SMBus, SMI, SPI, SSI, ST7669, SWD, SWIM, SWP, UART, UNI/O, USB1.1, USB PD 3, Wiegand		

* Measure signal under 14 MHz ONLY due to data transmission limitation.

Packing list

Item	Quantity
1. TB3016 device	1
2. Terminal Block (F/E/B)	0/0/1
3. D-Sub Connector (F/E/B)	0/0/1
4. Lead Cable (24-pin)	1
5. USB 3.0 Cable	1
6. Grippers (F/E/B)	5/10/20

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



22/2022, 2/12/2023