

Acute BusFinder

Protocol Analyzer & Logic Analyzer



270 x 175 x 55 (mm³)

- PC-based, 64 channels
- USB 3.0 interface, 12V power adaptor
- 32Gb total memory

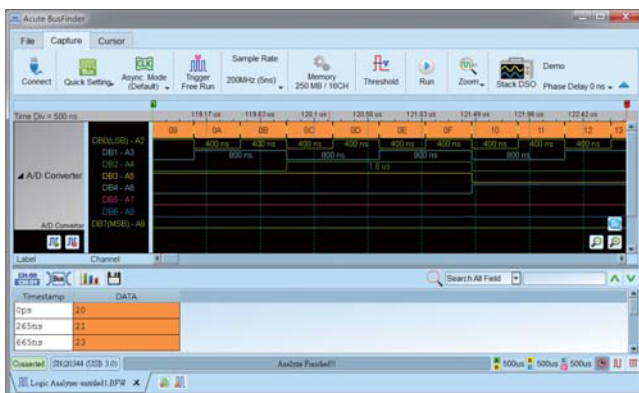
Protocol Analyzer: eMMC 5.1, MIPI D-PHY 1.2, NAND Flash, SD 3.0 (SDIO 3.0), SD 4.1 (UHS-II), SGMII, UFS2.1 (BF7264B+ Only)

- Real-time data display, post-capture waveforms
- Trigger for commands or data
- Different active probes for different protocols for easier connections
- Filter data to save more commands
- Hide data for easy reading
- Search data for quick finding
- Statistics for commands and data
- Two voltage detects to find design bugs from voltage drop
- Use PC hard disk (SSD) to log long time data
- Protocol monitor like dash camera for long time surveillance (months)

Logic Analyzer: eMMC 5.1, NAND Flash, SD 3.0 (SDIO 3.0), Serial Flash, SPI

- 2.4GHz timing analysis
- 8-state flow chart bus triggers
- Bus decodes with waveforms
- Stacks with a DSO to form as an MSO

Software Window



System Requirements

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



Acute®

PC-based T&M Instruments

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BusFinder

Device weight : 800g, Accessories weight : 1216g



Device *1



BNC to MCX *1



USB3.0 (1.8M) *1



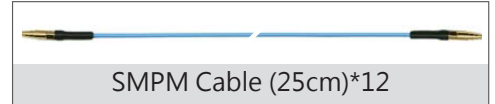
Adapter/Power cord *1

MIPI D-PHY Option

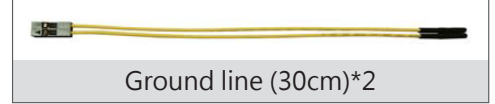
weight : 410g



MIPI D-PHY Way Station*2



SMPM Cable (25cm)*12



Ground line (30cm)*2



SMPM Extraction Tool*1



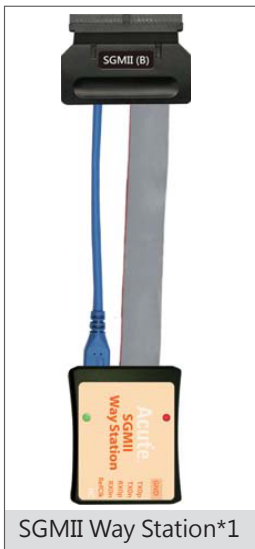
FPC End-tip*10



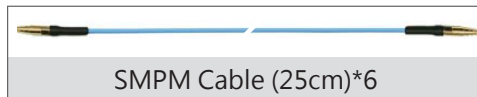
Micro USB 3.0 *2

SGMII Option

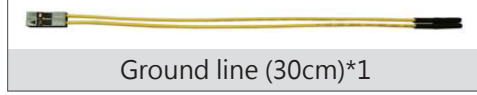
weight : 410g



SGMII Way Station*1



SMPM Cable (25cm)*6



Ground line (30cm)*1



SMPM Extraction Tool*1



FPC End-tip*5/ Connector*3



Micro USB 3.0 *1

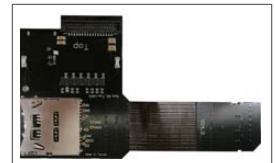
SD 4.1 Option

weight : 420g

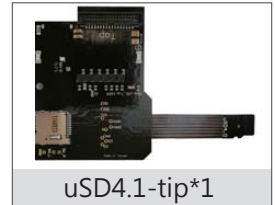
SD 4.1 & uSD 4.1 Probe



LA04 (B)-tip*2



SD4.1-tip*1



uSD4.1-tip*1



Micro USB 3.0 *2

SD 3.0 / SDIO3.0 Option

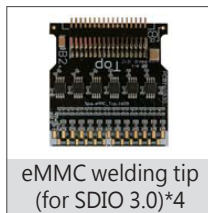
weight : 160g



LA04 (B)-tip*1



eMMC socket tip (for SDIO 3.0)*1 + Flying lead cable*1



eMMC welding tip (for SDIO 3.0)*4



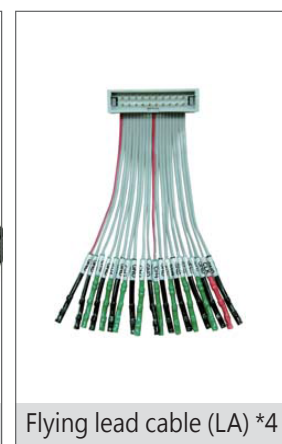
SD 3.0 tip*1

LA Option

weight : 410g



LA08-tip*2 / LA09-tip*2



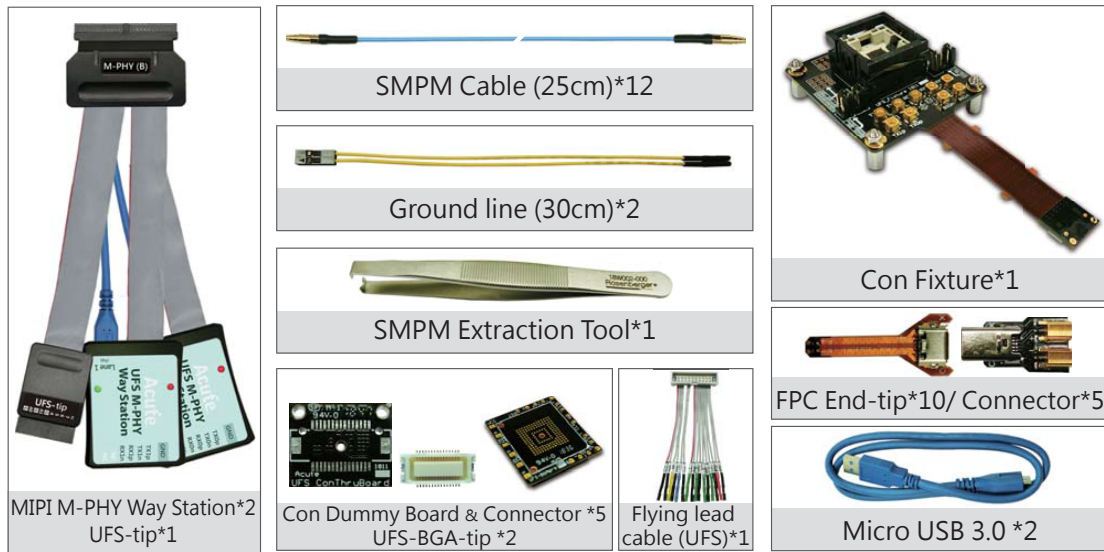
Flying lead cable (LA) *4



Grippers *40

UFS 2.1 Option (BF7264B+ Only)

weight : 550g



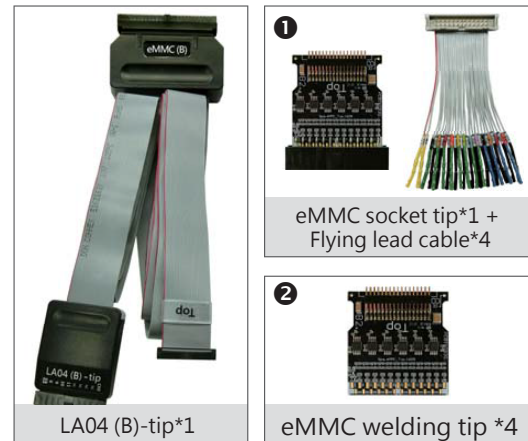
NAND Flash Option

weight : 226g



eMMC 5.1 Option

weight : 230g



Tip specification

*SE: Single Ended, Diff.: Differential Pair

Model		LA08/09	LA04 (B)	NAND, UFS	eMMC, SD 3.0	SD 4.1, uSD 4.1	End-tip
Number of Channels		8 / 8+1 (Data+CLK)	4 (Data)	4+2 (Data+Analog)	12+2 (Data+Analog)	6-SE / 3-Diff. / 2 (SD3.0 / SD4.1 / Analog)	1-Diff.
Threshold of Data	Range	-0.5V ~ +4.8V			0V ~ +3.3V		---
	Resolution	21mV					---
	Accuracy	±100mV + 5% *Vth					---
Input Voltage of Data	Maximum (Non-destructive)	±15V DC+AC peak			-0.5V ~ +5V DC+AC peak		±10V
	Operation	-1V ~ 8V			0V ~ 3.3V		0 ~ 5V
	Sensitivity	~300mV			~150mV		~200mVpp.
Impedance of Data		1MΩ 5pF			500kΩ 2pF		¹ 1kΩ (500+1pF) ² 250Ω
Input Voltage of Analog	Maximum (Non-destructive)	---		-0.5V ~ +8V DC+AC peak			---
	Operation	---		0V ~ 4V			---
	Resolution	---		~1mV			---
	Sampling Rate	---		1M			---
Impedance of analog		---		1MΩ 100pF			---

¹ D-PHY ² UFS2.1 / SGMII

BusFinder

Model		BF7264B	BF7264B+
Power	Power Source	12V Power adapter	
	Static Power Consumption	18W	
	Max Power Consumption	45W	
Hardware Interface		USB 3.0	
Timing Analysis (Asynchronous, Max. Sample Rate)		2.4GHz	
State Clock Rate (Synchronous, External Clock)		300MHz	
Storage		Conventional Timing, Transitional Timing	
Channels (Data / Clock)		64/4	
Total Sample Memory		32 Gb	
Timing vs. Channels vs. Memory	Timing Analysis	Available channels (Conventional / Transitional Timing) - Memory per channel	
	2.4 / 2GHz	(32 / 28) - 1Gb	
	1GHz	(64 / 56) - 500Mb	
	500 / 250 / 200MHz	(64 / 64) - 500Mb	
Trigger	Resolution	416 ps	
	Channels	64	
	States	8	
	Events	8	
	Pre / Post / Delay	Yes	
	Pass Counter	Yes (1 ~ 1000000 times)	
	Types	Channel, Pattern, Single / Multi Level, Width, Time-out, External	
	Bus (by option)	eMMC 5.1, NAND Flash, SD 3.0 (SDIO 3.0), Serial Flash (SPI NAND), SPI	
Input Voltage	Maximum	See Tip specification	
	Sensitivity	See Tip specification	
Impedance		See Tip specification	
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	
I/O port	Trig-In	TTL 3.3V level (Rising / Falling)	
	Trigger pulse approval	> 8ns	
	Trig-Out	TTL 3.3V	
	Ref. Clock Input	10MHz, Vpp=3.3 to 5V	
	Ref. Clock Output	10MHz, TTL3.3V	
	Connector type	MCX jack/female	
Protocol Option	eMMC 5.1	Flying lead cable / Gripper	
	MIPI D-PHY 1.2	SMPM Cable / End-tip	
	NAND Flash	Flying lead cable / Gripper	
	SD 3.0 / SDIO 3.0	SD 3.0 extender card / SDIO 3.0 extender card & Flying lead cable	
	SD 4.1	SD 4.0 extender card (covers SD 3.0)	
	SGMII	SMPM Cable / End-tip	
	UFS 2.1	---	Con Fixture / SMPM Cable / End-tip
	Logic Analyzer	Flying lead cable / Gripper	
Software Features	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	
Bus Decode		eMMC 5.1, NAND Flash, SD 3.0, Serial Flash (SPI NAND), SPI	
Dimension	L x W x H	270 x 175 x 55 (mm ³)	
Weight		See Protocol Option	

※ For BF7264B / B+, the maximum delivery Gripper number is 80 Grippers per mainframe unit.