

皇晶科技

BusFinder 协议分析仪 (BF7264B)



270 x 175 x 55 (mm³)

- PC-based, 64 通道
- USB 3.0 接口, 12V 电源
- 32Gb 总内存

协议分析仪选配：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)

- 实时显示协议资料
- 命令 (或资料) 触发
- 不同协议专用主动探头，便于接线并优化阻抗匹配
- 过滤不需资料，储存更多命令或资料
- 隐藏特定资料，简化阅读内容
- 搜寻特定资料
- 两组电压侦测及触发，利于定位掉电位置
- 资料统计，提供精准分析
- 协议记录器储存长时间的协议资料
- 协议监控器长时间 (数月以上) 监控协议资料

逻辑分析仪选配 / LVDS选配：eMMC 5.1, NAND Flash, SD 3.0 (SDIO 3.0), Serial Flash, SPI

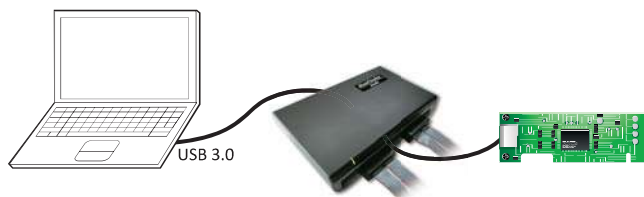
- 2.4GHz 时序分析
- 8 阶流程图式触发
- 提供波形显示
- 支援堆叠他牌示波器 (以实际支援机型为主)，同时观察数位及类比波形

软件画面

Timestamp	Bus Name/Id	Msg	VC	Dir	Type	OCID	VC	Dir	Type	Timestamp	Bus Name	OCID	VC	Dir	Type
10.437.044.0	LP	LPID01	0	Generic	Long Wri.		2	00	03	Host process	00	0001	F04D	0001	
10.437.045.0	LP	LPID01	0	DCR Short Write	03 (write_control_display)		2	04		Host process	00	0001			
10.437.046.0	LP	LPID01	0	DCR Short Write	03 (set_back_ill)		2	00		Host process	00	0001			
10.437.083.0	LP	LPID01	0	Generic	Long Wri.		2	00	04	Host process	00	0001	F0F2	0001	
10.437.105.0	LP	LPID01	0	Generic	Long Wri.		2	00	00	Host process	1A	0001	A0A7	0001	
10.437.104.0	LP	LPID01	0	Generic	Long Wri.		2	00	00	Host process	00	0001	6510	0001	
10.437.179.0	LP	LPID01	0	Generic	Long Wri.		2	00	00	Host process	1B	0001	B7FA	0001	
10.437.186.0	LP	LPID01	0	Generic	Long Wri.		2	00	00	Host process	00	0001	F0A0	0001	
10.437.208.0	LP	LPID01	0	Generic	Long Wri.		2	00	03	Host process	00	0001	F04D	0001	
10.437.219.0	LP	LPID01	0	DCR Short Write	01 (exit_sleep_mode)		2	00		Host process	26	0001			
10.437.220.0	LP	LPID01	0	DCR Short Write	03 (set_display_on)		2	00		Host process	2C	0001			
10.437.240.0	LP	LPID01	0	DCR Short Write	05 (set_display_brightness)		2	00		Host process	3D	0001			
10.437.240.0	LP	LPID01	0	DCR READ	no par. 0A		2	00		Host process	1F	0001			
10.437.262.0	LP	LPID01	0	DCR Short READ	no par.		2	00		Host process	1F	0001			
10.437.273.0	LP	LPID01	0	DCR Short READ	no par.		2	00		Host process	1F	0001			
10.437.283.0	LP	LPID01	0	DCR Short READ	no par.		2	00		Host process	1F	0001			
10.437.316.0	MS	0	0	DCR Long Write/W.	0C (write_memory_start)	2881	00	00	AA 0A 0A 0C 02 02...	Host process	04	0001			
10.437.316.0	MS	0	0	End of Transmis.			0F	0F		Host process	01	0001			
10.437.334.0	MS	0	0	DCR Long Write/W.	0C (write_memory_continue)	2881	0A 1B 00 00 0C 7A 3C 55 02...			Host process	04	0001			
10.437.334.0	MS	0	0	End of Transmis.			0F	0F		Host process	01	0001			
10.437.333.0	MS	0	0	DCR Long Write/W.	0C (write_memory_continue)	2881	0A 10 00 00 0F 10 00 00 77...			Host process	04	0001			
10.437.333.0	MS	0	0	End of Transmis.			0F	0F		Host process	01	0001			
10.437.333.0	MS	0	0	DCR Long Write/W.	0C (write_memory_continue)	2881	1A 4C 3A 3A 3E 0A 18 77...			Host process	04	0001			
10.437.333.0	MS	0	0	End of Transmis.			0F	0F		Host process	01	0001			
10.437.333.0	MS	0	0	DCR Long Write/W.	0C (write_memory_continue)	2881	0A 10 00 00 0F 0E 0E 1E 4D...			Host process	04	0001			
10.437.333.0	MS	0	0	End of Transmis.			0F	0F		Host process	01	0001			

系统需求

- USB 3.0 port
- Win 7, Win 8, Win 10 (64 位), Win11
- PC RAM 16GB (推荐) 或者 8GB (至少)



Acute®

PC-based T&M Instruments

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BusFinder 7264B/B+

主机重量: 800g, 配件重量: 1216g



主机*1



BNC to MCX cable *1



适配器 & 电源线 各1



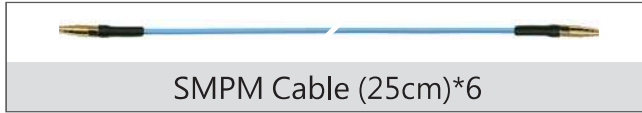
USB3.0 cable (1.8M) *1

SGMII 方案

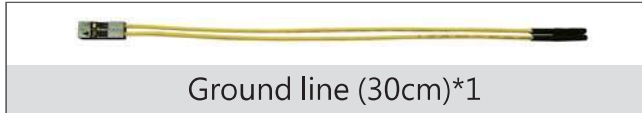
重量: 410g



SGMII Way Station*1



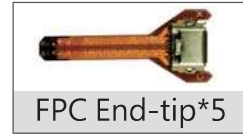
SMPM Cable (25cm)*6



Ground line (30cm)*1



SMPM Extraction Tool*1



FPC End-tip*5



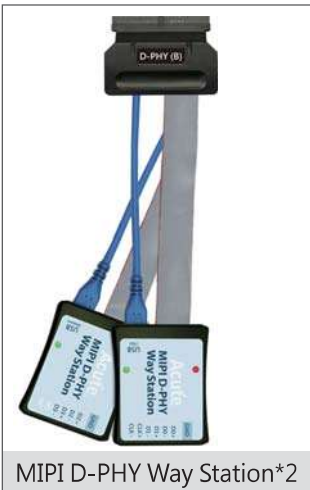
Connector*3



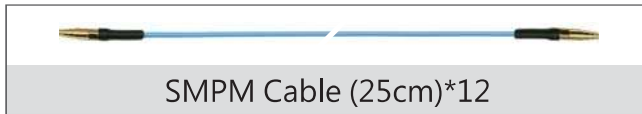
Micro USB 3.0*1

MIPI D-PHY 方案

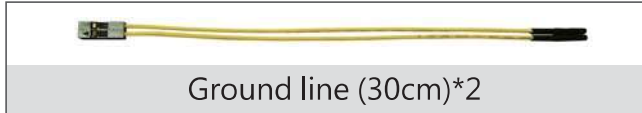
重量: 410g



MIPI D-PHY Way Station*2



SMPM Cable (25cm)*12



Ground line (30cm)*2



SMPM Extraction Tool*1



FPC End-tip*10



Connector*10



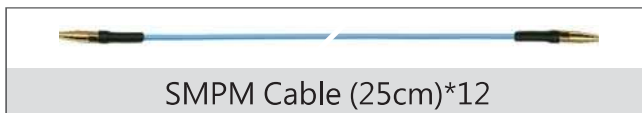
Micro USB 3.0*2

UFS 2.1 方案 (BF7264B+ Only)

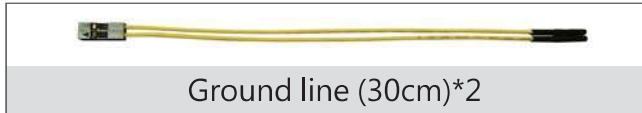
重量: 550g



MIPI M-PHY Way Station*2
UFS-tip*1



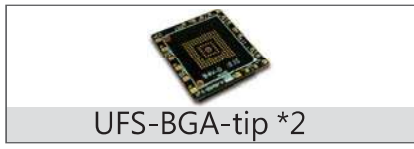
SMPM Cable (25cm)*12



Ground line (30cm)*2



SMPM Extraction Tool*1



UFS-BGA-tip *2



FPC End-tip*10



Connector*5



Flying lead cable (UFS)



连接器主板*1
Con Dummy Board & Connector *5



Micro USB 3.0*2

SD 3.0 / SDIO3.0 方案

重量: 160g



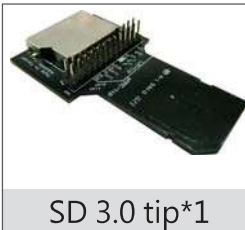
LA04 (B)-tip*1



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



eMMC 跳线接头 (for SDIO 3.0)*4



SD 3.0 tip*1

SD 4.1 (UHS-II/含 SD 3.0/ SD 6.1 Legacy mode) 方案

重量: 420g

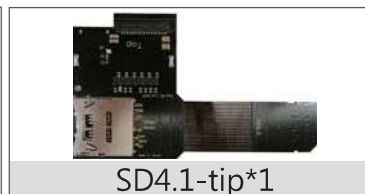
SD 4.1 & uSD 4.1 Probe



LA04 (B)-tip*2



Micro USB 3.0*2



SD4.1-tip*1



uSD4.1-tip*1

NAND Flash 方案

重量: 450g



LA08-tip*1/LA09-tip*2
NAND-tip*1



LA20p*3

NAND16p*1

Flying lead cable(NF)*4



探针*40

eMMC 5.1 方案

重量: 230g



LA04 (B)-tip*1



1 eMMC 接头 (for SDIO 3.0)*1 + Flying lead cable*4



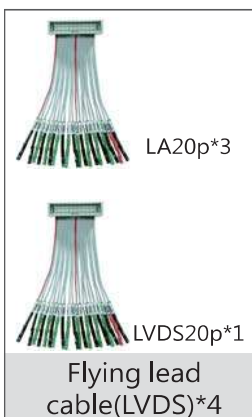
2 eMMC 跳线接头*4

LVDS 方案

重量: 450g



LA08-tip*1/LA09-tip*2
LVDS-tip*1



LA20p*3

LVDS20p*1

Flying lead cable(LVDS)*4



探针*40

LA 方案

重量: 450g



LA08-tip*2
LA09-tip*2



Flying lead cable(LA)*4

探针*40

Tip 规格表

*SE: 单端, Diff: 差分信号

项目	LVDS	LA08/09	LA04 (B)	NAND, UFS	eMMC, SD 3.0	SD 4.1, uSD 4.1	End-tip
通道组合	8-Diff.	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.
触发电平 (Data)	范围	---	-0.5V ~ +4.8V		0V ~ +3.3V		---
	分辨率	---	21mV		---		---
	精度	---	±100mV + 5% *Vth		---		---
输入电平 (Data)	最大 (非破坏性输入)	-0.5V ~ +4.6V DC+AC peak	±15V DC+AC peak		-0.5V ~ +5V DC+AC peak		±10V
	工作范围	0V ~ 3.3V	-1V ~ 8V		0V ~ 3.3V		0 ~ 5V
	灵敏度	~100mV	~300mV		~150mV		~200mVpp.
输入阻抗 (Data)	75KΩ 3pF	1MΩ 5pF		500kΩ 2pF		¹ 1kΩ (500+1pF) ² 250Ω	
输入电平 (Analog)	最大 (非破坏性输入)	---	---		-0.5V ~ +8V DC+AC peak		---
	工作范围	---	---		0V ~ 4V		---
	分辨率	---	---		~1mV		---
	采样率	---	---		1M		---
输入阻抗 (Analog)	---	---		1MΩ 100pF		---	

¹ D-PHY ² UFS2.1 / SGMII

BusFinder 系列

技术指标		BF7264B	BF7264B+
电源	电源	12V Power adapter	
	待机功耗	18W	
	最大瞬时功耗	45W	
传输界面		USB 3.0	
时序分析 (异步,采样频率)		2.4GHz	
状态分析 (同步,外部时钟)		300MHz	
资料存储方式		普通存储, 跳变存储	
通道 (Data / Clock)		64/4	
总内存		32 Gb	
时序 vs. 通道数 vs. 内存	时序分析	普通存储 / 跳变存储可用通道数 - 每通道内存	
	2.4 / 2GHz	32/28 - 1Gb	
	1GHz	64/56 - 500Mb	
	500 / 250 / 200MHz	64/64 - 500Mb	
触发	分辨率	416 ps	
	通道数	64	
	状态	8	
	事件	8	
	前置 / 后置 / 延迟	Yes	
	忽略次数	Yes (1 ~ 1000000 times)	
	种类	字节, 通道, 宽度, 超时, 单一 / 多条件, 外触发	
	协议 (根据方案)	eMMC 5.1, NAND Flash, SD 3.0 (SDIO 3.0), Serial Flash (SPI NAND), SPI	
输入电平	最大	请参阅 Tip 规格表	
	灵敏度	请参阅 Tip 规格表	
输入阻抗	请参阅 Tip 规格表		
温度	工作温度 / 存放温度	5°C~45°C (41°F~113°F)/-10°C~65°C (14°F~149°F)	
相位误差	< 500 ps		
输入 / 输出	触发输入 (叠加用)	TTL 3.3V (上升沿 / 下降沿)	
	触发脉冲	> 8ns	
	触发输出 (叠加用)	TTL 3.3V	
	参考时钟输入	10MHz, Vpp=3.3 to 5V	
	参考时钟输出	10MHz, TTL3.3V	
	接口种类	MCX jack/female	
选购方案	eMMC 5.1	排线 / 探针	
	MIPI D-PHY 1.2	线材 / End-tip	
	NAND Flash	排线 / 探针	
	SD 3.0 / SDIO 3.0	SD 3.0 转板 / SDIO 3.0 转板 & 排线	
	SD 4.1	SD 4.0 转板 (相容 SD 3.0)	
	SGMII	线材 / End-tip	
	UFS 2.1	---	连接器主板 / 线材 / End-tip
	Logic Analyzer	排线 / 探针	
	LVDS	排线 / 探针	
	软件功能	波形放大缩小	有 (可使用鼠标滚轮)
使用语系		English / 繁体中文 / 简体中文	
波形高度		可改变	
全域窗口/报告窗口		有	
快速鼠标定位		有	
导入通道名称		有	
快速新增总线分析		有	
触发光标/辅助光标		1/25	
总线分析		eMMC 5.1, NAND Flash, SD 3.0, Serial Flash (SPI NAND), SPI	
主机尺寸	长 x 宽 x 高 (mm³)	270 x 175 x 55 (mm³)	

※ BF7264B / B+ 主机 · 每台出货之探针上限为 80 支。