

LA3000

2-in-1 Analyzer (Logic & Protocol)

2017.05

Acute[®]
PC-based T&M Instruments

Hardware

- PC-based
- 68 / 136 channels
- USB3.0 interface
- 12V power
- 4GB total memory
- Stackable with a DSO to form as an MSO
- Protocol Analyzer: I2C, SD3.0, SPI, UART, ...
- Logic Analyzer: Logic triggers, Protocol triggers/decodes
- 4GHz timing analysis, 250MHz state analysis

Protocol Analyzer

- Real time display

I2C, SD 3.0, SPI, UART,...

Filter

Hardware filter to save more needed data

- Search

Search data while capturing data

- Trigger

Hardware trigger for command or data

- Waveforms

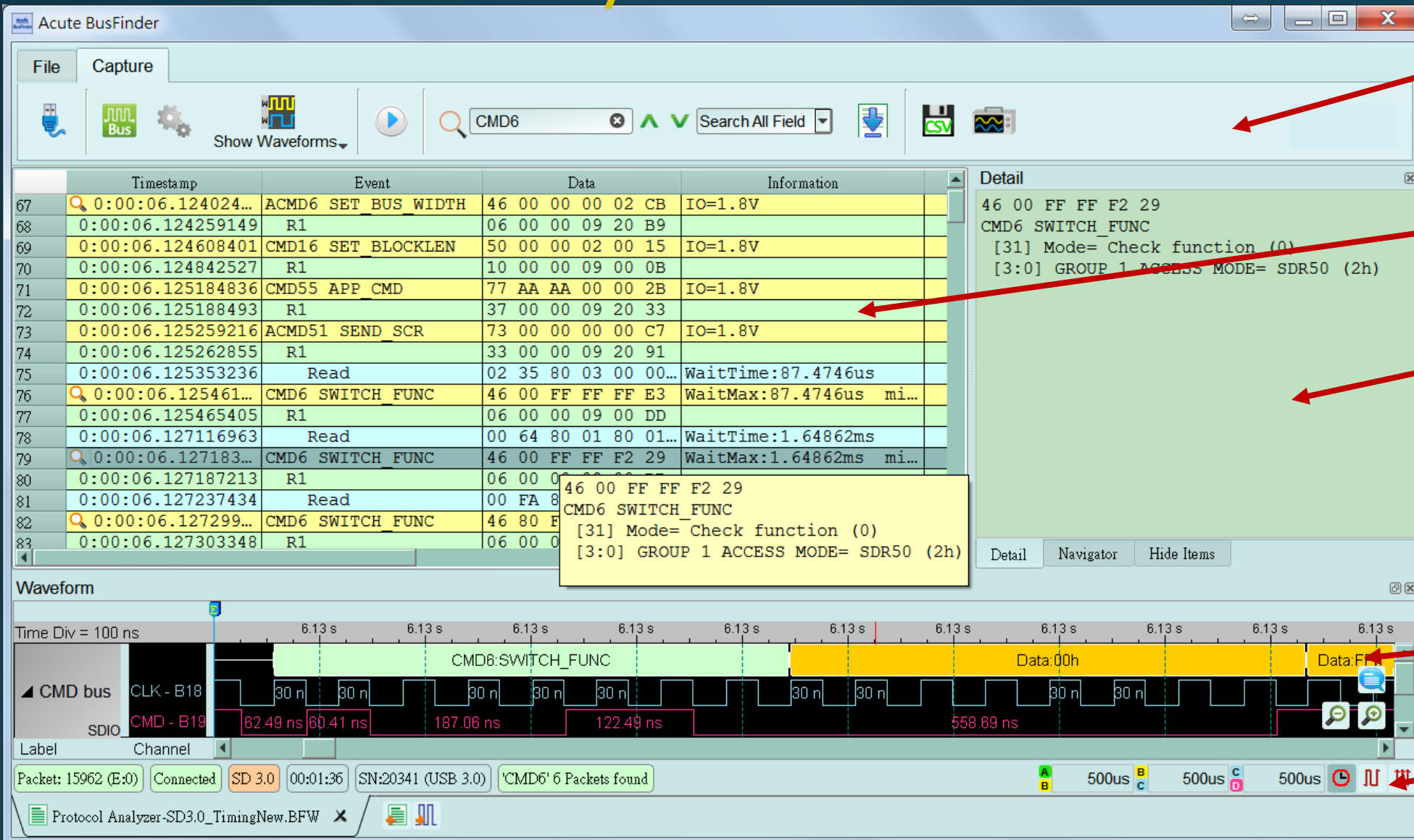
Display waveforms after capture stopped

Logic Analyzer

- High sample rate
4GHz timing analysis
- Deep memory
4GB RAM to log very long time data
- Active probe
Good impedance and 75cm long for easy setup
- Powerful triggers
Logic triggers, flow-chart bus triggers
- Many bus decodes
80+ bus decodes with waveforms
- Mixed signals
Stackable with a DSO to capture and display digital and analog waveforms

Ch	Memory
64	500Mb
32	1Gb
16	2Gb
8	4Gb
4	8Gb
2	16Gb

Protocol Analyzer



Tool bar

Report window

Details/Statistics

Waveform window

Status bar

Protocol Settings

Protocol

Probe

Protocol Settings

Protocol: eMMC 5.1, I2C, NAND Flash, SD 3.0, SD 4.0

Sample Rate: 2.4 GHz

Primary Protocol Analyzer

SD3.0

☐ SD 4 Probe

☒ SD 3 Probe

☐ Custom SD3.0

Secondary Protocol Analyzer or I/O

☒ NAND Flash: NAND channel

☐ I/O: ...

Filter

☒ Data Length > 512 bytes

Trigger on

☐ CMD/DATA

☒ CMD

☐ DATA

☐ VDD Drop

☐ End bit error

☐ CRC16 error

☐ CRC7 error

Option

☒ DDR mode

Block size: 512 bytes

Bus width: 4 bit

Tuning settings

☒ VDD detect channel

☒ A0 ☐ A1

☐ Default

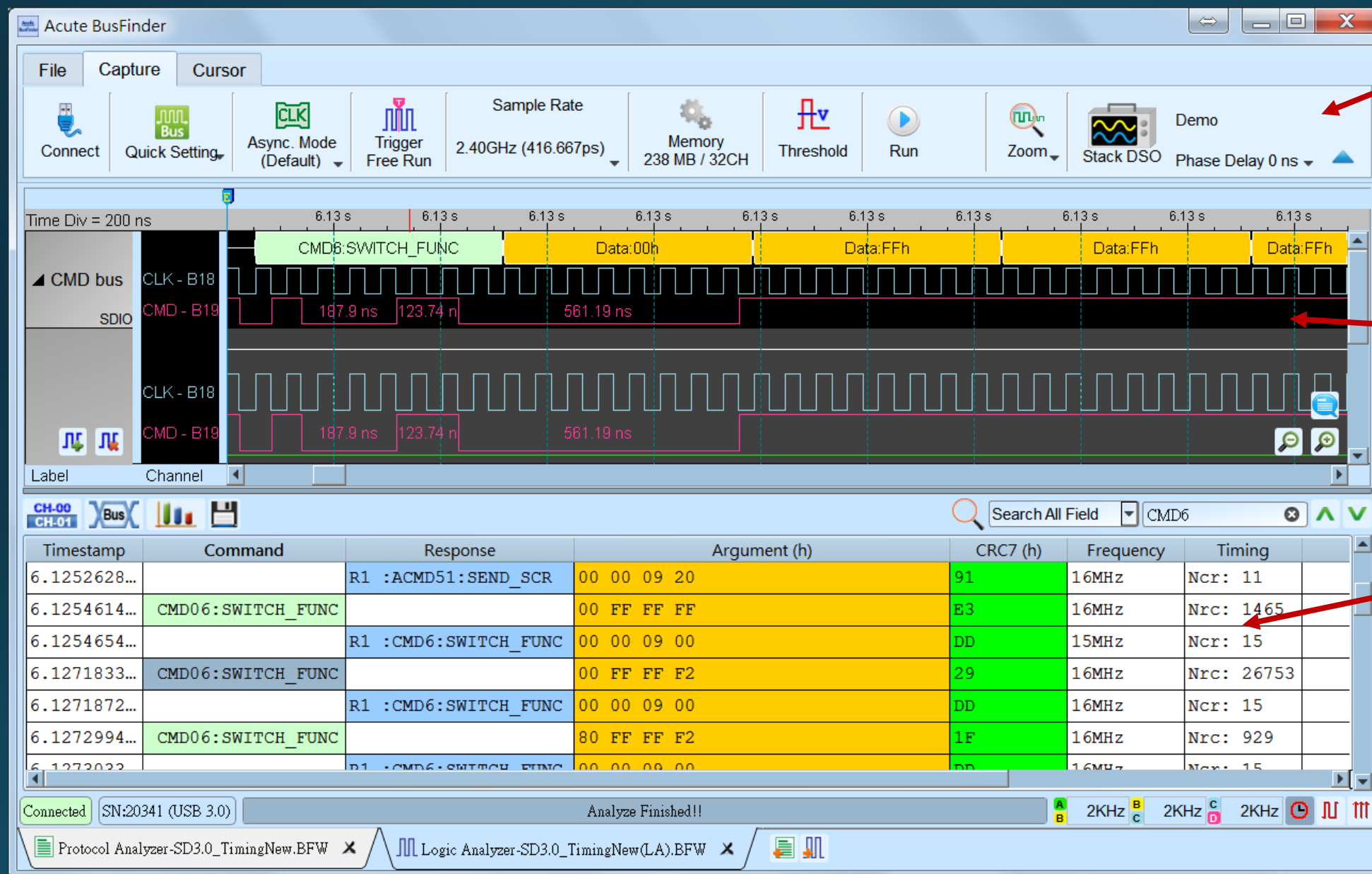
OK Cancel

Filter condition

Trigger event

Protocol option

Logic Analyzer (SD 3.0)



Tool bar

Waveform window

Report window

Logic Analyzer-Trigger Settings

SD/eMMC Trigger Settings

Channel

CLK B0

CMD B1

AUX B10

Protocol Setting

Protocol

☒ SD ☐ eMMC

☒ CMD Only ☐ CMD + RESP

☒ CMD Gap Time

10 ms

tODLY Settings

Host -> Device 0ps

Device -> Host 5ns

DATA Settings

Error Check Settings

Default

Clause Trigger

Run

State 1

True

False

Trigger

Trigger

State x 7

Counter x 2

State 1

Event 1

☒ Command ☐ Response

Any Command

DATA0 = X 0 1 User Defined

S	T	Command	(Description)
X	X	XXh	
		Stuff Bits[31:24]	
		XXh	
		Stuff Bits[23:16]	
		XXh	
		Stuff Bits[15:8]	
		XXh	
		Stuff Bits[7:0]	
		XXh	
		CRC	E
		XXh	1

OK Cancel