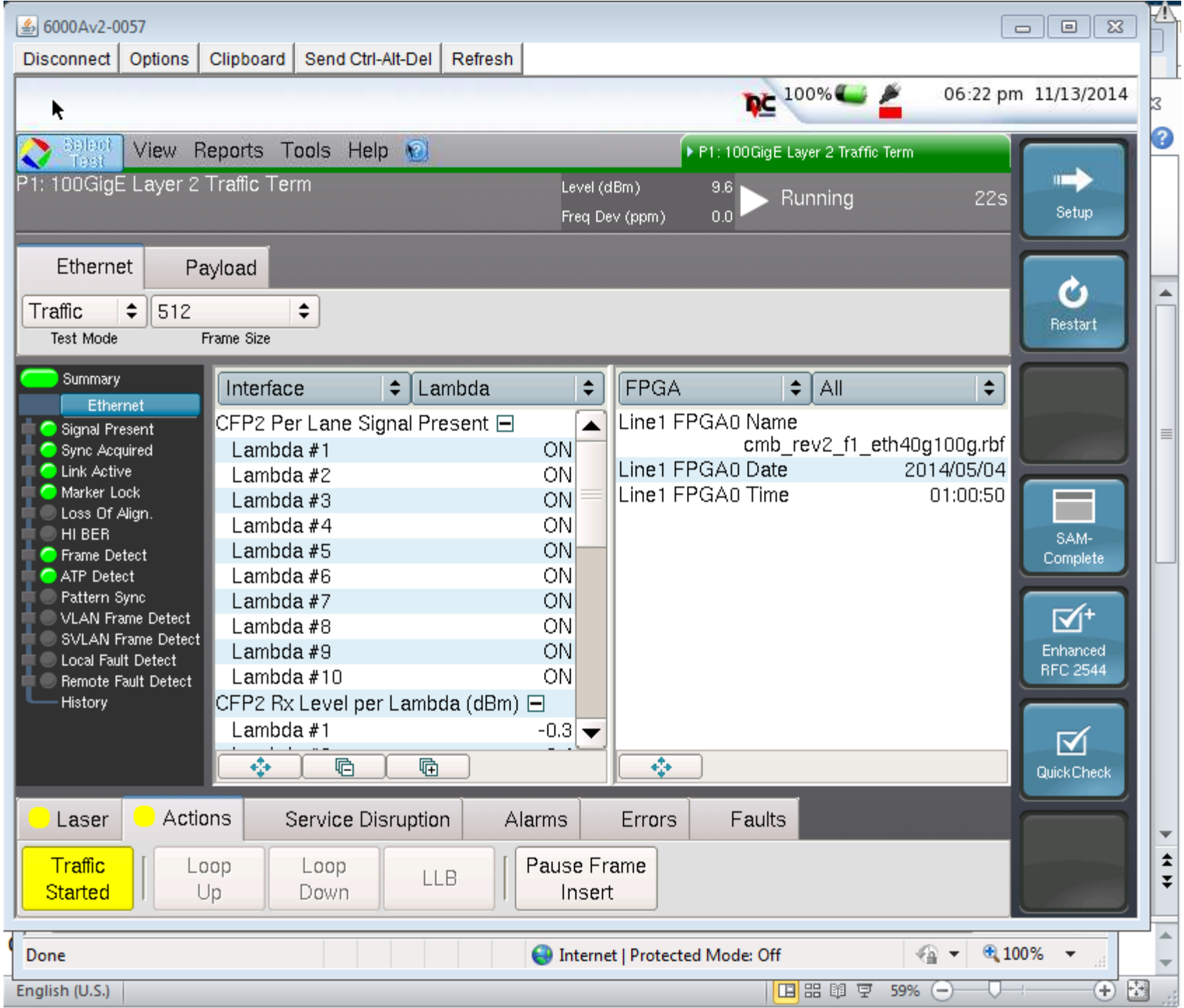
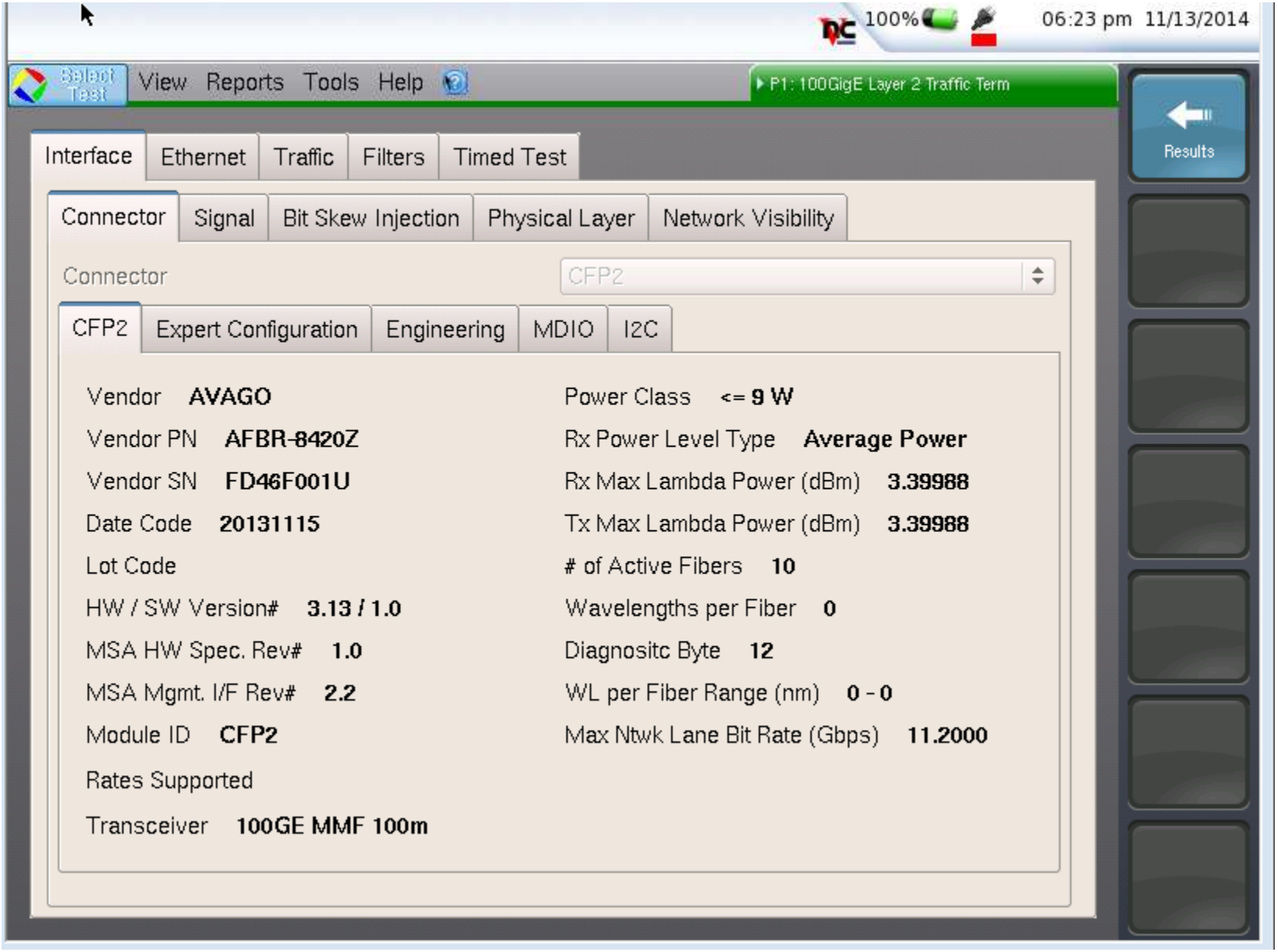
Individual Laser Control on T-BERD

- How does this work?
  - Address A013 controls the network lanes = Lasers
  - SR10 has 10 network lanes
    - Controlled by 10 bits
    - Bit set to 0 means laser on
    - Set A013 to 0 and 10 lasers on
    - Set A013 to 1 and laser 1 is off
    - Set A013 to 8 and laser 4 is off
    - Set A013 to FF and lasers 1 through 8 are off
    - Set A013 to 3FF and all lasers are off
    - Set A013 to 0 and we're back to all lasers on


6000Av2-0057
Disconnect
Options
Clipboard
Send Ctrl-Alt-Del
Refresh
100%
06:22 pm 11/13/2014
Select Test
View
Reports
Tools
Help
P1: 100GigE Layer 2 Traffic Term
P1: 100GigE Layer 2 Traffic Term
Level (dBm) 9.6
Freq Dev (ppm) 0.0
Running
22s
Setup
Restart
Ethernet
Payload
Traffic
Test Mode
512
Frame Size
Summary
Ethernet
Signal Present
Sync Acquired
Link Active
Marker Lock
Loss Of Align.
HI BER
Frame Detect
ATP Detect
Pattern Sync
VLAN Frame Detect
SVLAN Frame Detect
Local Fault Detect
Remote Fault Detect
History
Interface
Lambda
CFP2 Per Lane Signal Present
Lambda #1 ON
Lambda #2 ON
Lambda #3 ON
Lambda #4 ON
Lambda #5 ON
Lambda #6 ON
Lambda #7 ON
Lambda #8 ON
Lambda #9 ON
Lambda #10 ON
CFP2 Rx Level per Lambda (dBm)
Lambda #1 -0.3
FPGA
All
Line1 FPGA0 Name
cmb_rev2_f1_eth40g100g.rbf
Line1 FPGA0 Date 2014/05/04
Line1 FPGA0 Time 01:00:50
SAM-Complete
Enhanced RFC 2544
QuickCheck
Laser
Actions
Service Disruption
Alarms
Errors
Faults
Traffic Started
Loop Up
Loop Down
LLB
Pause Frame Insert
Done
Internet | Protected Mode: Off
100%
English (U.S.)
59%


100%
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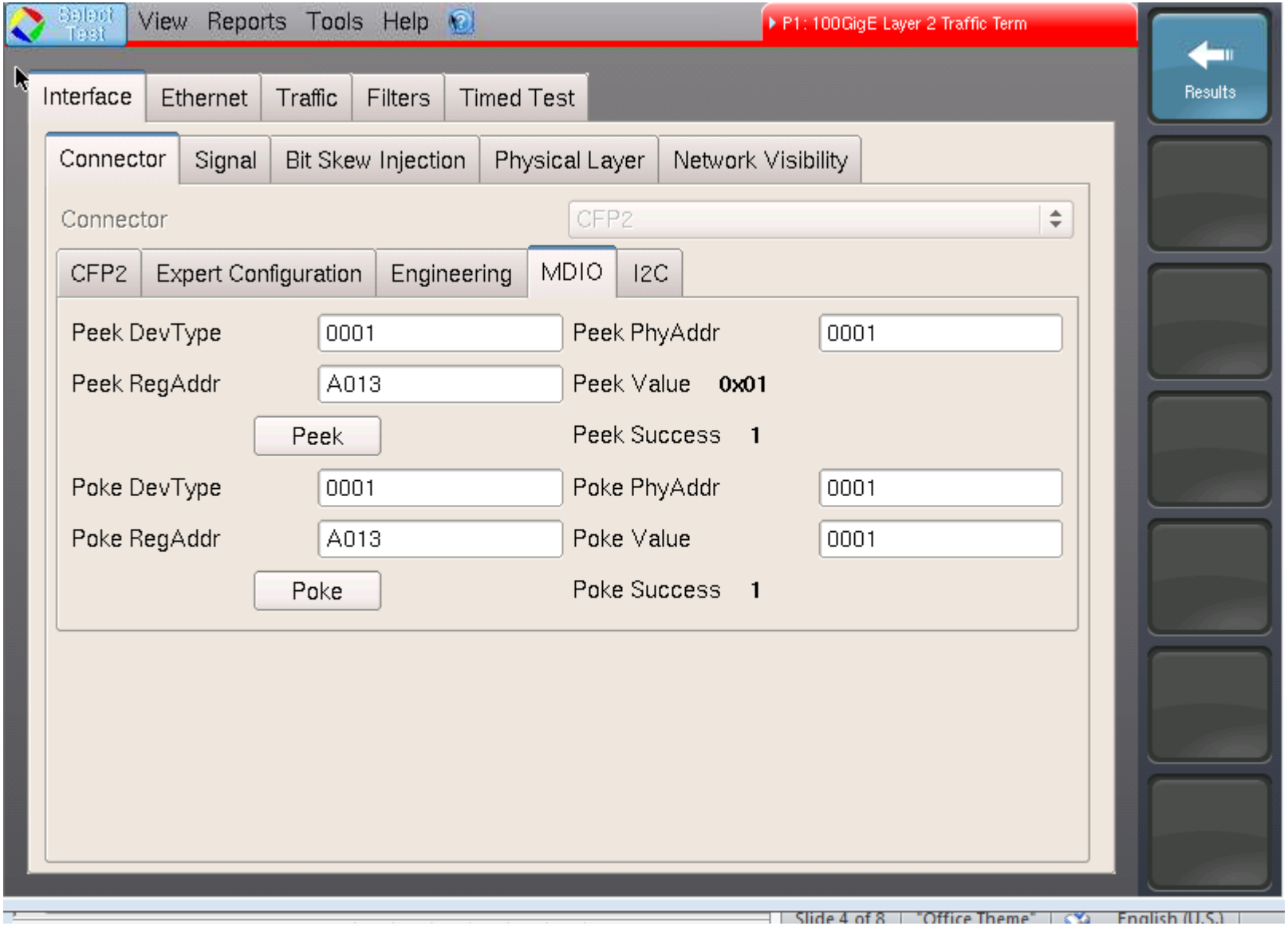
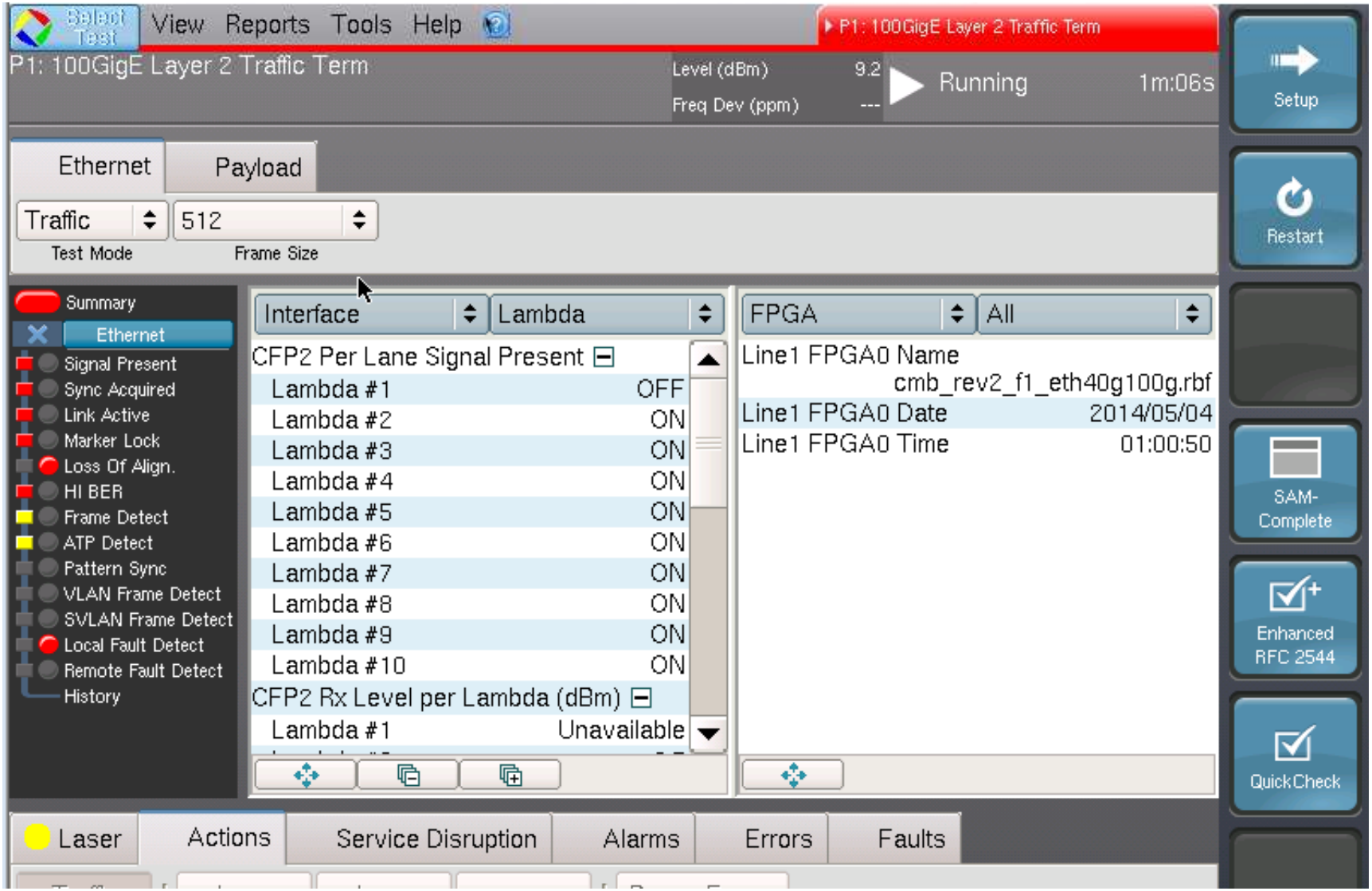
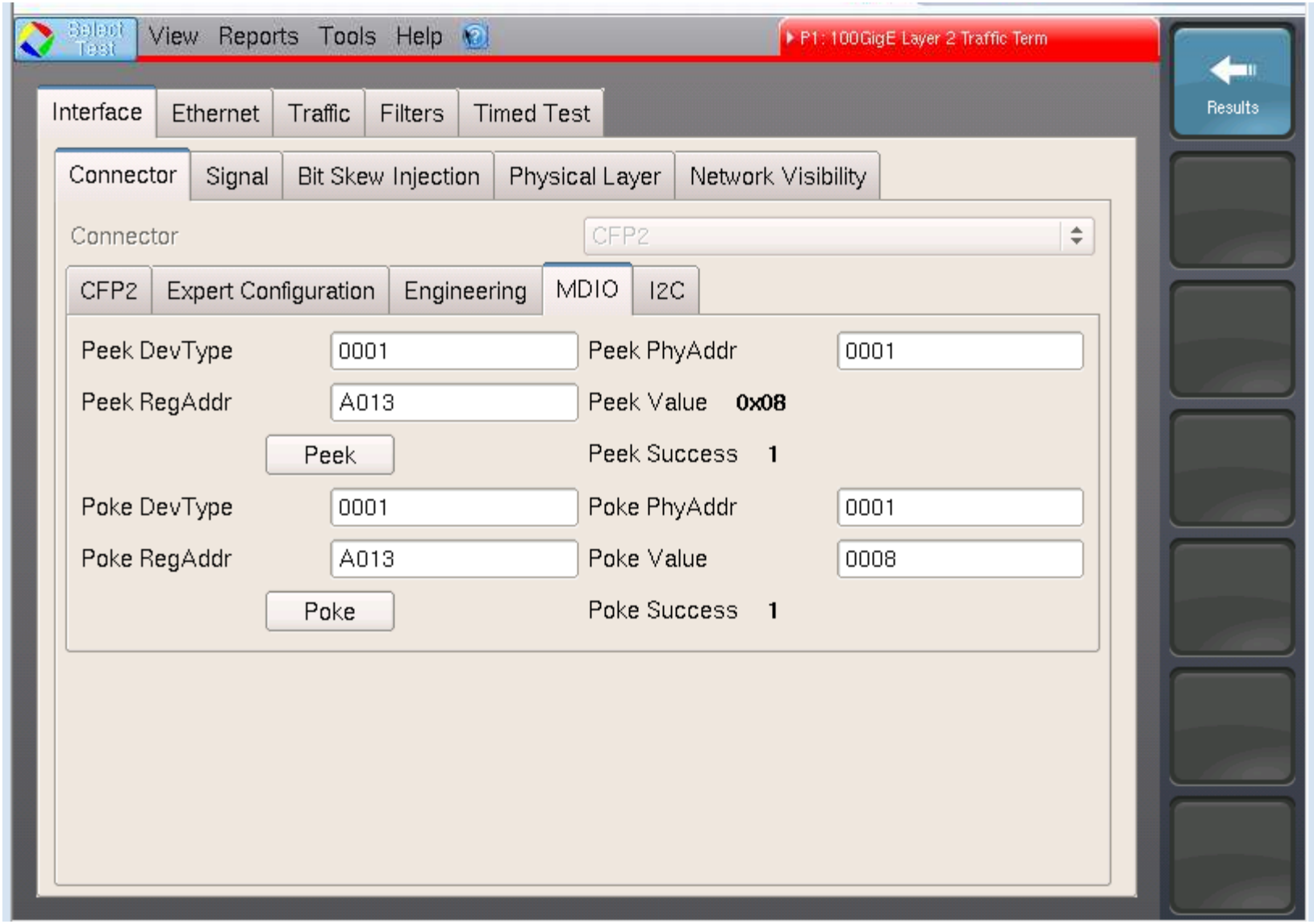
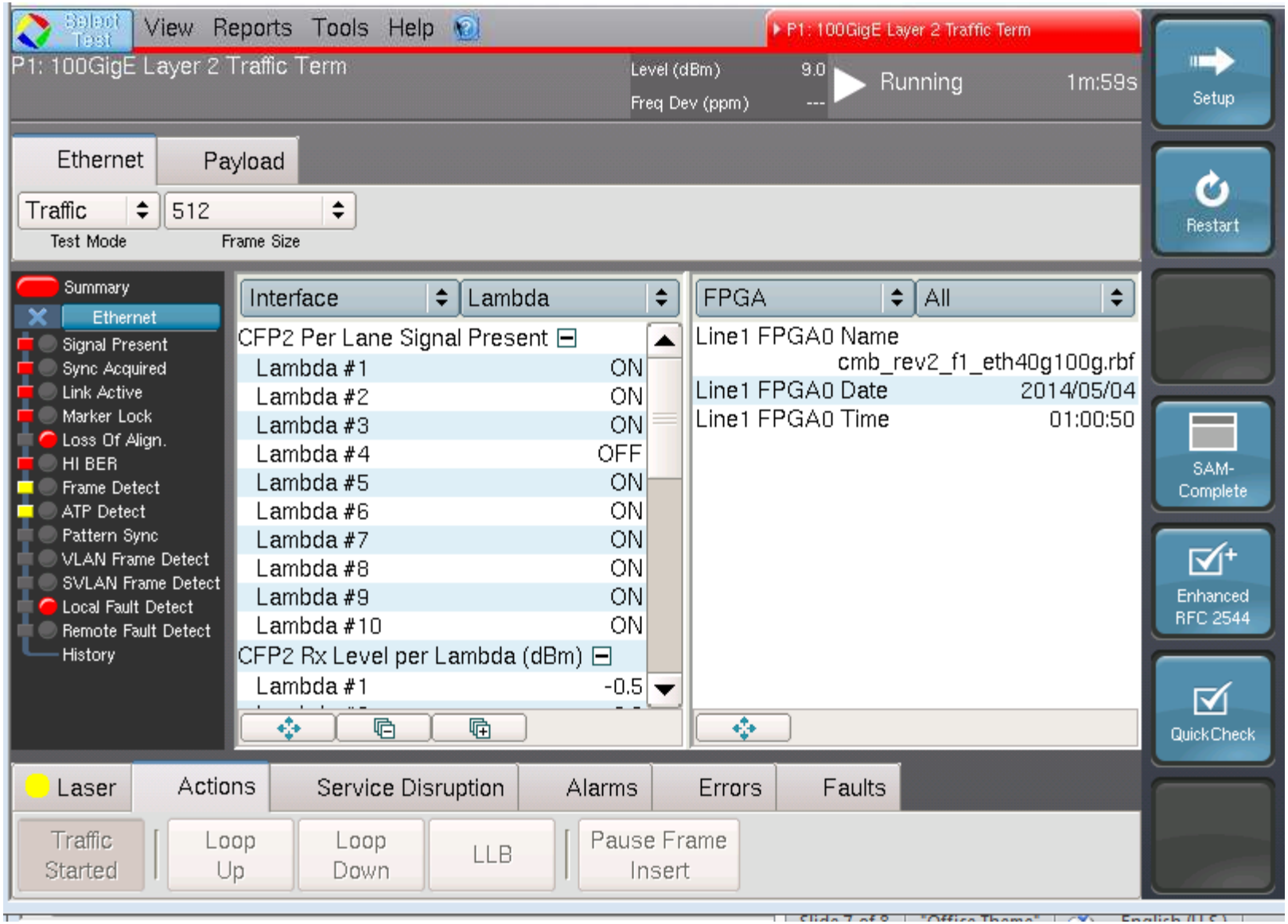
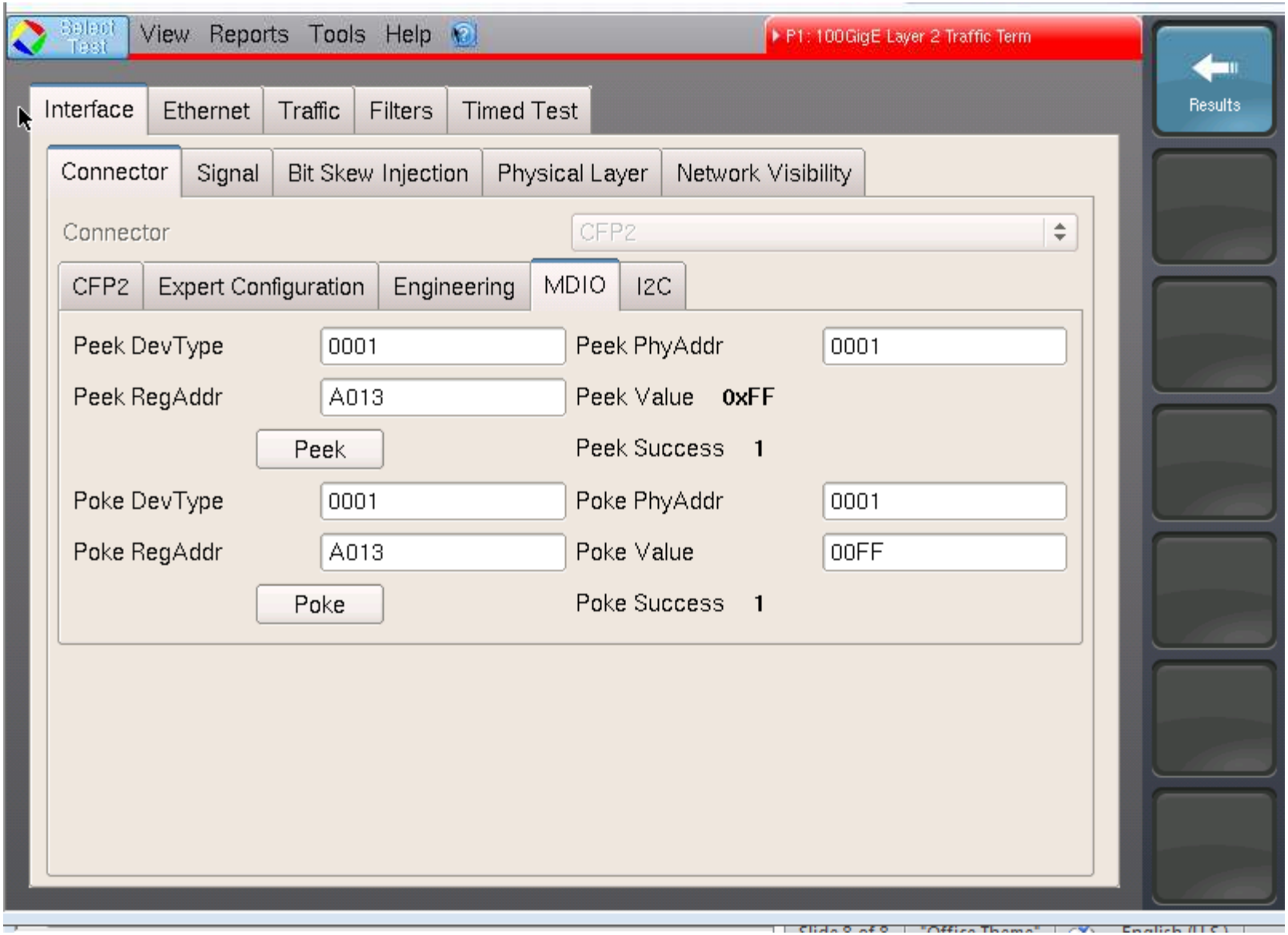
Select Test
View
Reports
Tools
Help
P1: 100GigE Layer 2 Traffic Term
Results
Interface
Ethernet
Traffic
Filters
Timed Test
Connector
Signal
Bit Skew Injection
Physical Layer
Network Visibility
Connector
CFP2
CFP2
Expert Configuration
Engineering
MDIO
I2C
Vendor AVAGO
Vendor PN AFBR-8420Z
Vendor SN FD46F001U
Date Code 20131115
Lot Code
HW / SW Version# 3.13 / 1.0
MSA HW Spec. Rev# 1.0
MSA Mgmt. I/F Rev# 2.2
Module ID CFP2
Rates Supported
Transceiver 100GE MMF 100m
Power Class <= 9 W
Rx Power Level Type Average Power
Rx Max Lambda Power (dBm) 3.39988
Tx Max Lambda Power (dBm) 3.39988
# of Active Fibers 10
Wavelengths per Fiber 0
Diagnositc Byte 12
WL per Fiber Range (nm) 0 - 0
Max Ntwk Lane Bit Rate (Gbps) 11.2000

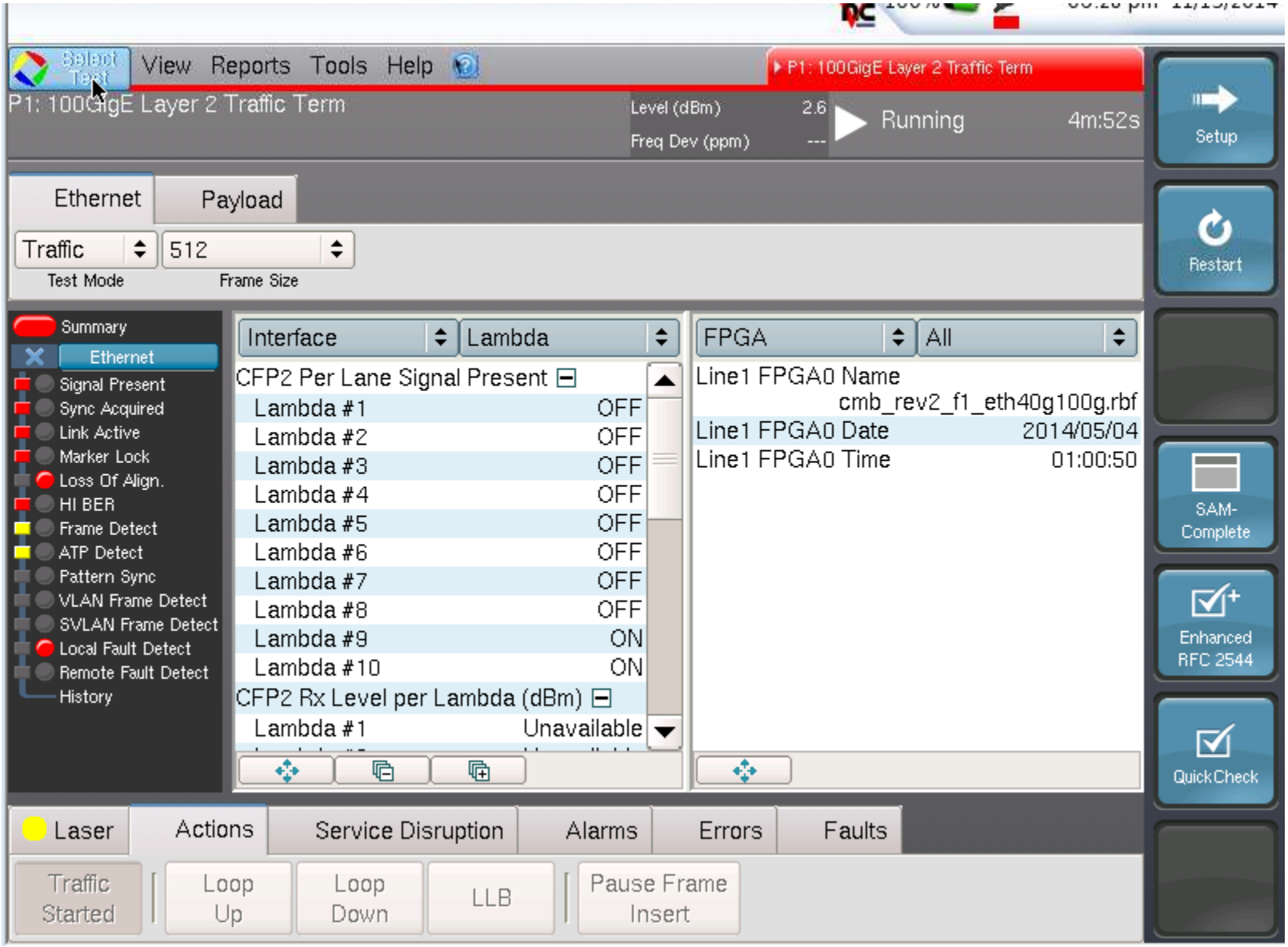

Select Test
View
Reports
Tools
Help
P1: 100GigE Layer 2 Traffic Term
Results
Interface
Ethernet
Traffic
Filters
Timed Test
Connector
Signal
Bit Skew Injection
Physical Layer
Network Visibility
Connector
CFP2
CFP2
Expert Configuration
Engineering
MDIO
I2C
Peek DevType
0001
Peek PhyAddr
0001
Peek RegAddr
A013
Peek Value
0x01
Peek
Peek Success
1
Poke DevType
0001
Poke PhyAddr
0001
Poke RegAddr
A013
Poke Value
0001
Poke
Poke Success
1

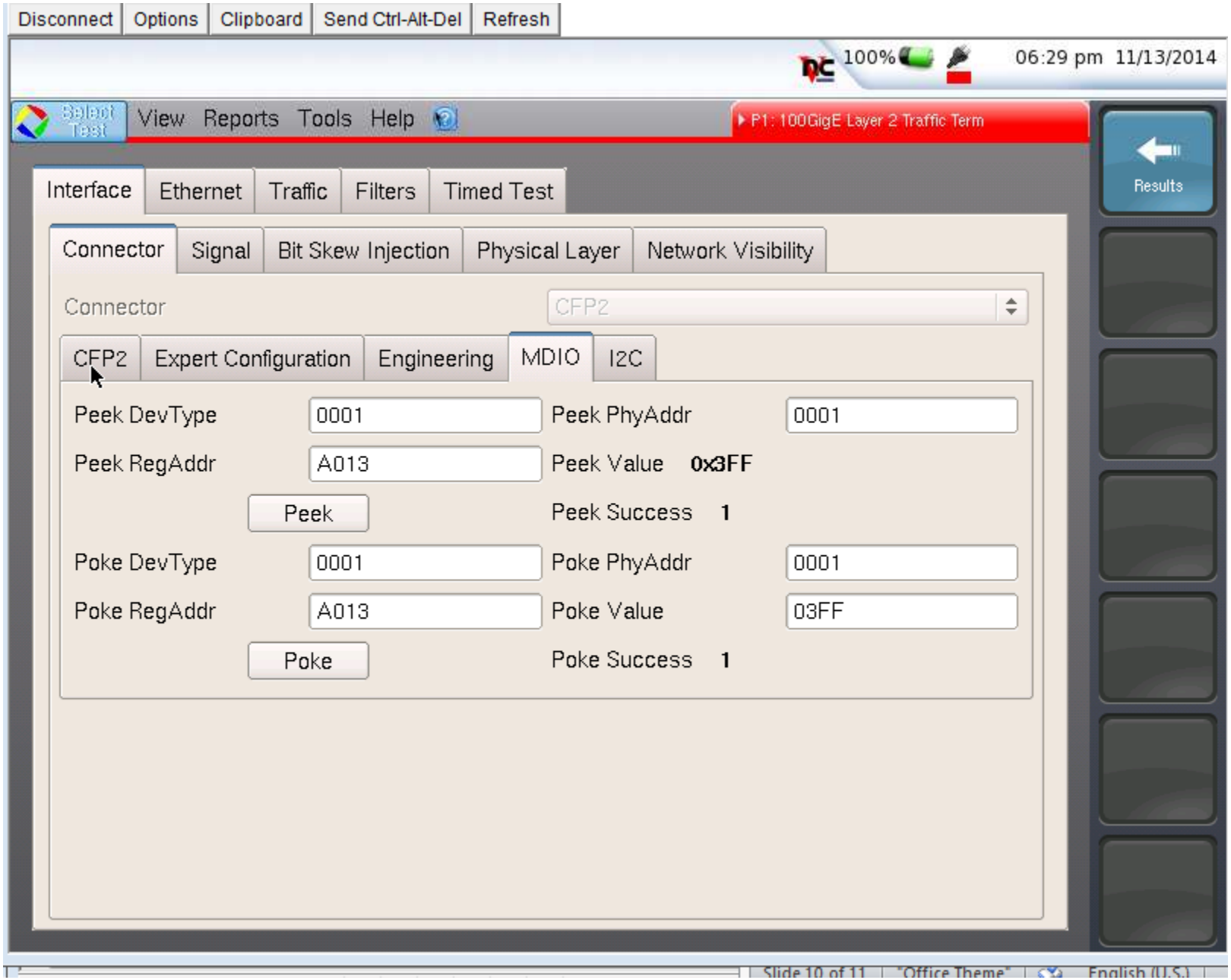

Select Test
View
Reports
Tools
Help
P1: 100GigE Layer 2 Traffic Term
P1: 100GigE Layer 2 Traffic Term
Level (dBm) 9.2
Freq Dev (ppm) ---
Running
1m:06s
Setup
Restart
SAM-Complete
Enhanced RFC 2544
QuickCheck
Ethernet
Payload
Traffic
512
Test Mode
Frame Size
Summary
Ethernet
Signal Present
Sync Acquired
Link Active
Marker Lock
Loss Of Align.
HI BER
Frame Detect
ATP Detect
Pattern Sync
VLAN Frame Detect
SVLAN Frame Detect
Local Fault Detect
Remote Fault Detect
History
Interface
Lambda
CFP2 Per Lane Signal Present
Lambda #1 OFF
Lambda #2 ON
Lambda #3 ON
Lambda #4 ON
Lambda #5 ON
Lambda #6 ON
Lambda #7 ON
Lambda #8 ON
Lambda #9 ON
Lambda #10 ON
CFP2 Rx Level per Lambda (dBm)
Lambda #1 Unavailable
FPGA
All
Line1 FPGA0 Name
cmb_rev2_f1_eth40g100g.rbf
Line1 FPGA0 Date 2014/05/04
Line1 FPGA0 Time 01:00:50
Laser
Actions
Service Disruption
Alarms
Errors
Faults


Select Test
View
Reports
Tools
Help
P1: 100GigE Layer 2 Traffic Term
Results
Interface
Ethernet
Traffic
Filters
Timed Test
Connector
Signal
Bit Skew Injection
Physical Layer
Network Visibility
Connector
CFP2
CFP2
Expert Configuration
Engineering
MDIO
I2C
Peek DevType
0001
Peek PhyAddr
0001
Peek RegAddr
A013
Peek Value
0x08
Peek
Peek Success
1
Poke DevType
0001
Poke PhyAddr
0001
Poke RegAddr
A013
Poke Value
0008
Poke
Poke Success
1


Select Test
View
Reports
Tools
Help
P1: 100GigE Layer 2 Traffic Term
P1: 100GigE Layer 2 Traffic Term
Level (dBm) 9.0
Freq Dev (ppm) ---
Running
1m:59s
Setup
Restart
SAM-Complete
Enhanced RFC 2544
QuickCheck
Ethernet
Payload
Traffic
Test Mode
512
Frame Size
Summary
Ethernet
Signal Present
Sync Acquired
Link Active
Marker Lock
Loss Of Align.
HI BER
Frame Detect
ATP Detect
Pattern Sync
VLAN Frame Detect
SVLAN Frame Detect
Local Fault Detect
Remote Fault Detect
History
Interface
Lambda
CFP2 Per Lane Signal Present
Lambda #1 ON
Lambda #2 ON
Lambda #3 ON
Lambda #4 OFF
Lambda #5 ON
Lambda #6 ON
Lambda #7 ON
Lambda #8 ON
Lambda #9 ON
Lambda #10 ON
CFP2 Rx Level per Lambda (dBm)
Lambda #1 -0.5
FPGA
All
Line1 FPGA0 Name
cmb_rev2_f1_eth40g100g.rbf
Line1 FPGA0 Date 2014/05/04
Line1 FPGA0 Time 01:00:50
Laser
Actions
Service Disruption
Alarms
Errors
Faults
Traffic Started
Loop Up
Loop Down
LLB
Pause Frame Insert


Select Test
View
Reports
Tools
Help
P1: 100GigE Layer 2 Traffic Term
Results
Interface
Ethernet
Traffic
Filters
Timed Test
Connector
Signal
Bit Skew Injection
Physical Layer
Network Visibility
Connector
CFP2
CFP2
Expert Configuration
Engineering
MDIO
I2C
Peek DevType
0001
Peek PhyAddr
0001
Peek RegAddr
A013
Peek Value
0xFF
Peek
Peek Success
1
Poke DevType
0001
Poke PhyAddr
0001
Poke RegAddr
A013
Poke Value
00FF
Poke
Poke Success
1


Select Test
View
Reports
Tools
Help
P1: 100GigE Layer 2 Traffic Term
P1: 100GigE Layer 2 Traffic Term
Level (dBm) 2.6
Freq Dev (ppm) ---
Running
4m:52s
Setup
Restart
SAM-Complete
Enhanced RFC 2544
QuickCheck
Ethernet
Payload
Traffic
Test Mode
512
Frame Size
Summary
Ethernet
Signal Present
Sync Acquired
Link Active
Marker Lock
Loss Of Align.
HI BER
Frame Detect
ATP Detect
Pattern Sync
VLAN Frame Detect
SVLAN Frame Detect
Local Fault Detect
Remote Fault Detect
History
Interface
Lambda
CFP2 Per Lane Signal Present
Lambda #1 OFF
Lambda #2 OFF
Lambda #3 OFF
Lambda #4 OFF
Lambda #5 OFF
Lambda #6 OFF
Lambda #7 OFF
Lambda #8 OFF
Lambda #9 ON
Lambda #10 ON
CFP2 Rx Level per Lambda (dBm)
Lambda #1 Unavailable
FPGA
All
Line1 FPGA0 Name
cmb_rev2_f1_eth40g100g.rbf
Line1 FPGA0 Date 2014/05/04
Line1 FPGA0 Time 01:00:50
Laser
Actions
Service Disruption
Alarms
Errors
Faults
Traffic Started
Loop Up
Loop Down
LLB
Pause Frame Insert


Disconnect
Options
Clipboard
Send Ctrl-Alt-Del
Refresh
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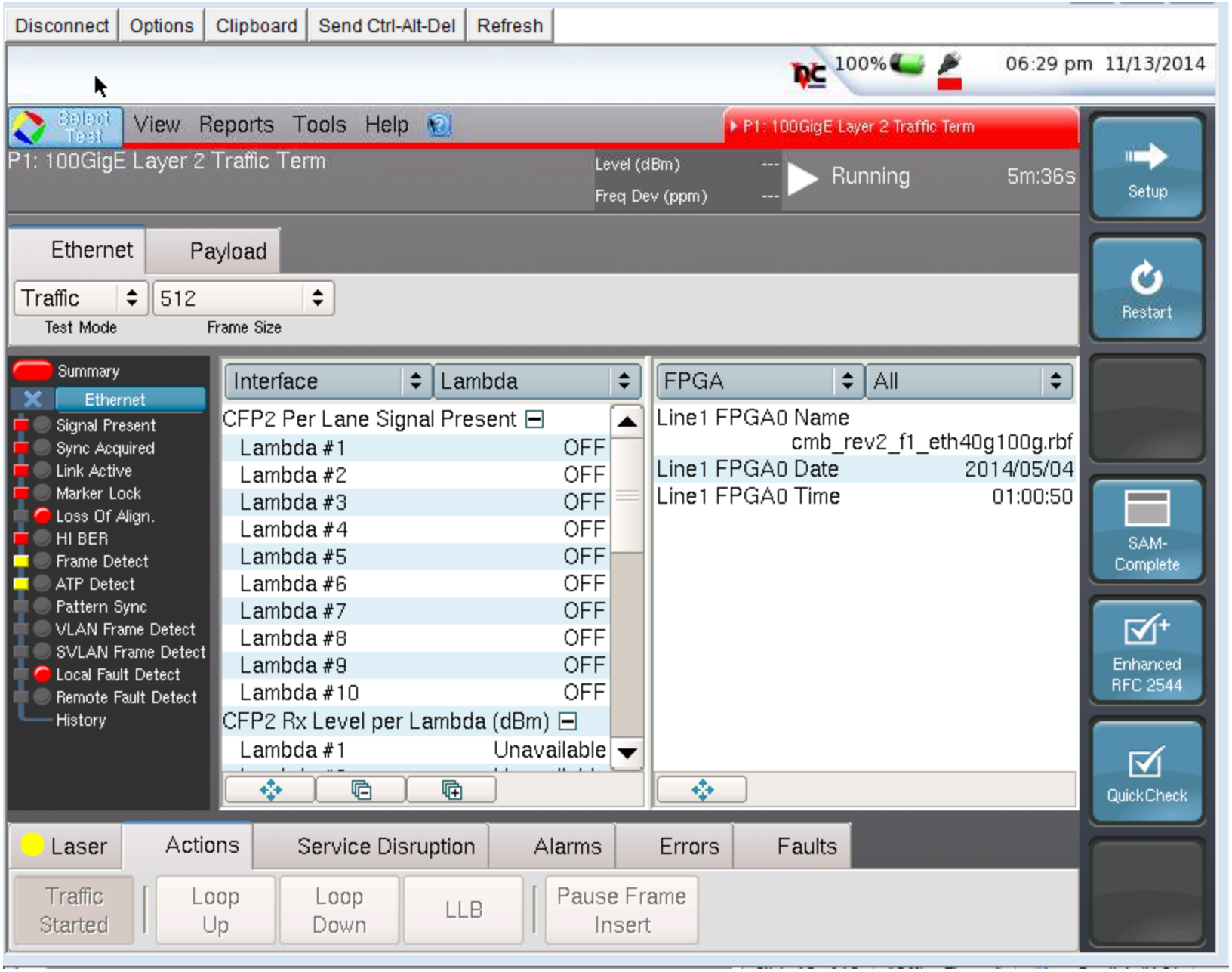
06:29 pm 11/13/2014
Select Test
View
Reports
Tools
Help
P1: 100GigE Layer 2 Traffic Term
Results
Interface
Ethernet
Traffic
Filters
Timed Test
Connector
Signal
Bit Skew Injection
Physical Layer
Network Visibility
Connector
CFP2
CFP2
Expert Configuration
Engineering
MDIO
I2C
Peek DevType
0001
Peek PhyAddr
0001
Peek RegAddr
A013
Peek Value
0x3FF
Peek
Peek Success
1
Poke DevType
0001
Poke PhyAddr
0001
Poke RegAddr
A013
Poke Value
03FF
Poke
Poke Success
1


Disconnect
Options
Clipboard
Send Ctrl-Alt-Del
Refresh
100%
06:29 pm 11/13/2014
Select Test
View
Reports
Tools
Help
P1: 100GigE Layer 2 Traffic Term
P1: 100GigE Layer 2 Traffic Term
Level (dBm) ---
Freq Dev (ppm) ---
Running
5m:36s
Setup
Restart
SAM-Complete
Enhanced RFC 2544
QuickCheck
Ethernet
Payload
Traffic
Test Mode
512
Frame Size
Summary
Ethernet
Signal Present
Sync Acquired
Link Active
Marker Lock
Loss Of Align.
HI BER
Frame Detect
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Pattern Sync
VLAN Frame Detect
SVLAN Frame Detect
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Remote Fault Detect
History
Interface
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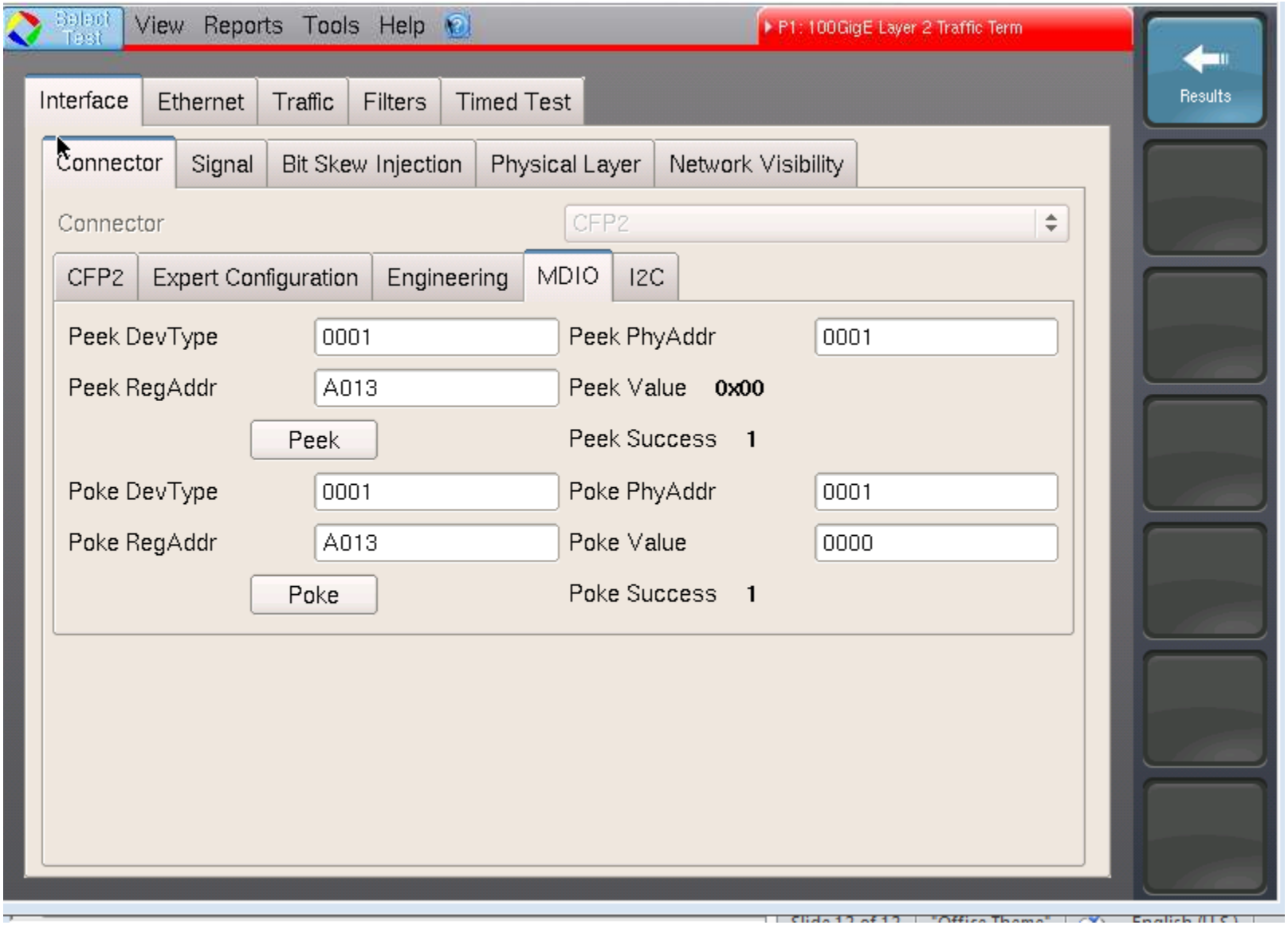
CFP2 Per Lane Signal Present
Lambda #1 OFF
Lambda #2 OFF
Lambda #3 OFF
Lambda #4 OFF
Lambda #5 OFF
Lambda #6 OFF
Lambda #7 OFF
Lambda #8 OFF
Lambda #9 OFF
Lambda #10 OFF
CFP2 Rx Level per Lambda (dBm)
Lambda #1 Unavailable
FPGA
All
Line1 FPGA0 Name cmb_rev2_f1_eth40g100g.rbf
Line1 FPGA0 Date 2014/05/04
Line1 FPGA0 Time 01:00:50
Laser
Actions
Service Disruption
Alarms
Errors
Faults
Traffic Started
Loop Up
Loop Down
LLB
Pause Frame Insert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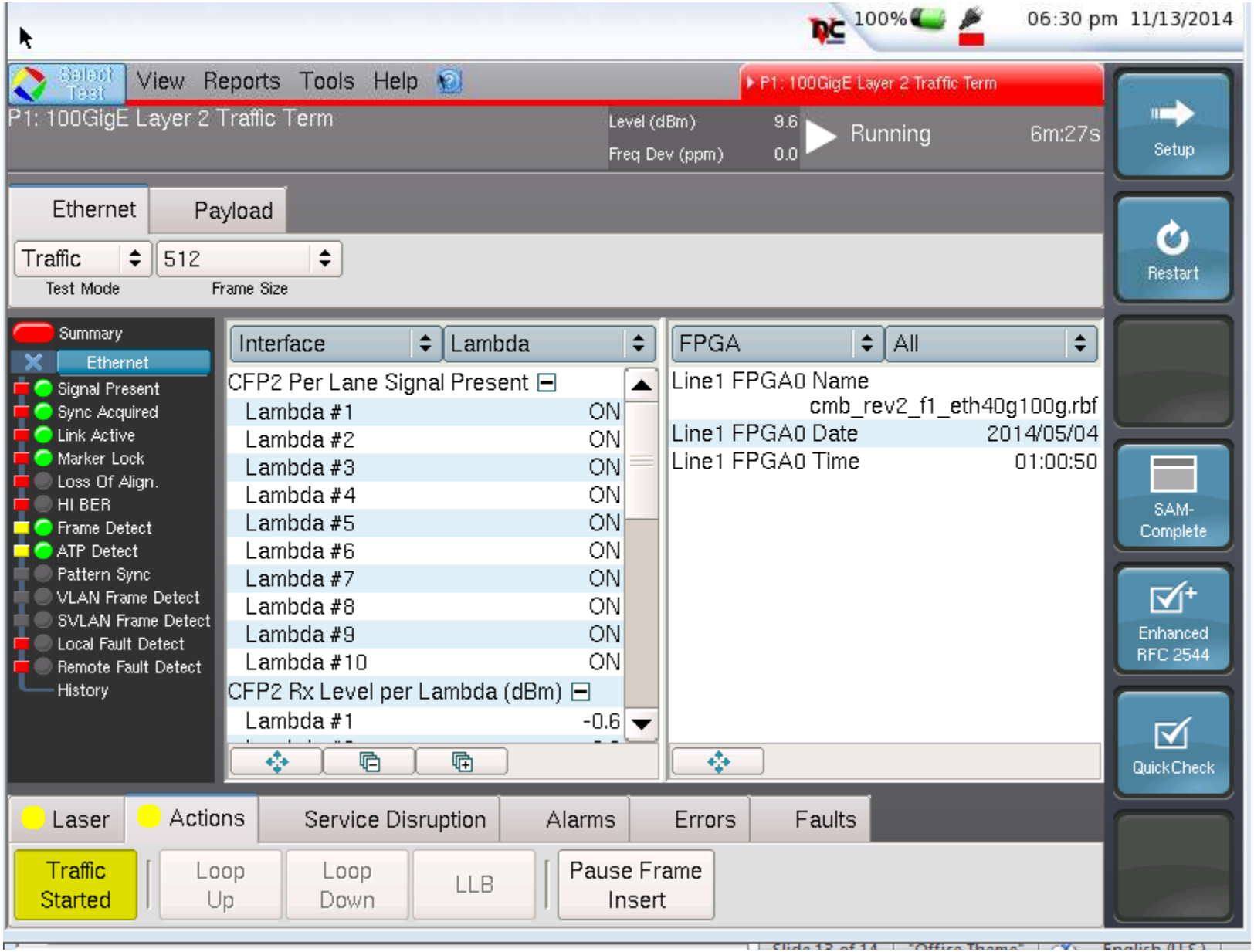
Connector
CFP2
CFP2
Expert Configuration
Engineering
MDIO
I2C
Peek DevType
0001
Peek PhyAddr
0001
Peek RegAddr
A013
Peek Value
0x00
Peek
Peek Success
1
Poke DevType
0001
Poke PhyAddr
0001
Poke RegAddr
A013
Poke Value
0000
Poke
Poke Success
1


100%
06:30 pm 11/13/2014
Select Test
View
Reports
Tools
Help
P1: 100GigE Layer 2 Traffic Term
P1: 100GigE Layer 2 Traffic Term
Level (dBm) 9.6
Freq Dev (ppm) 0.0
Running
6m:27s
Setup
Restart
SAM-Complete
Enhanced RFC 2544
QuickCheck
Ethernet
Payload
Traffic
Test Mode
512
Frame Size
Summary
Ethernet
Signal Present
Sync Acquired
Link Active
Marker Lock
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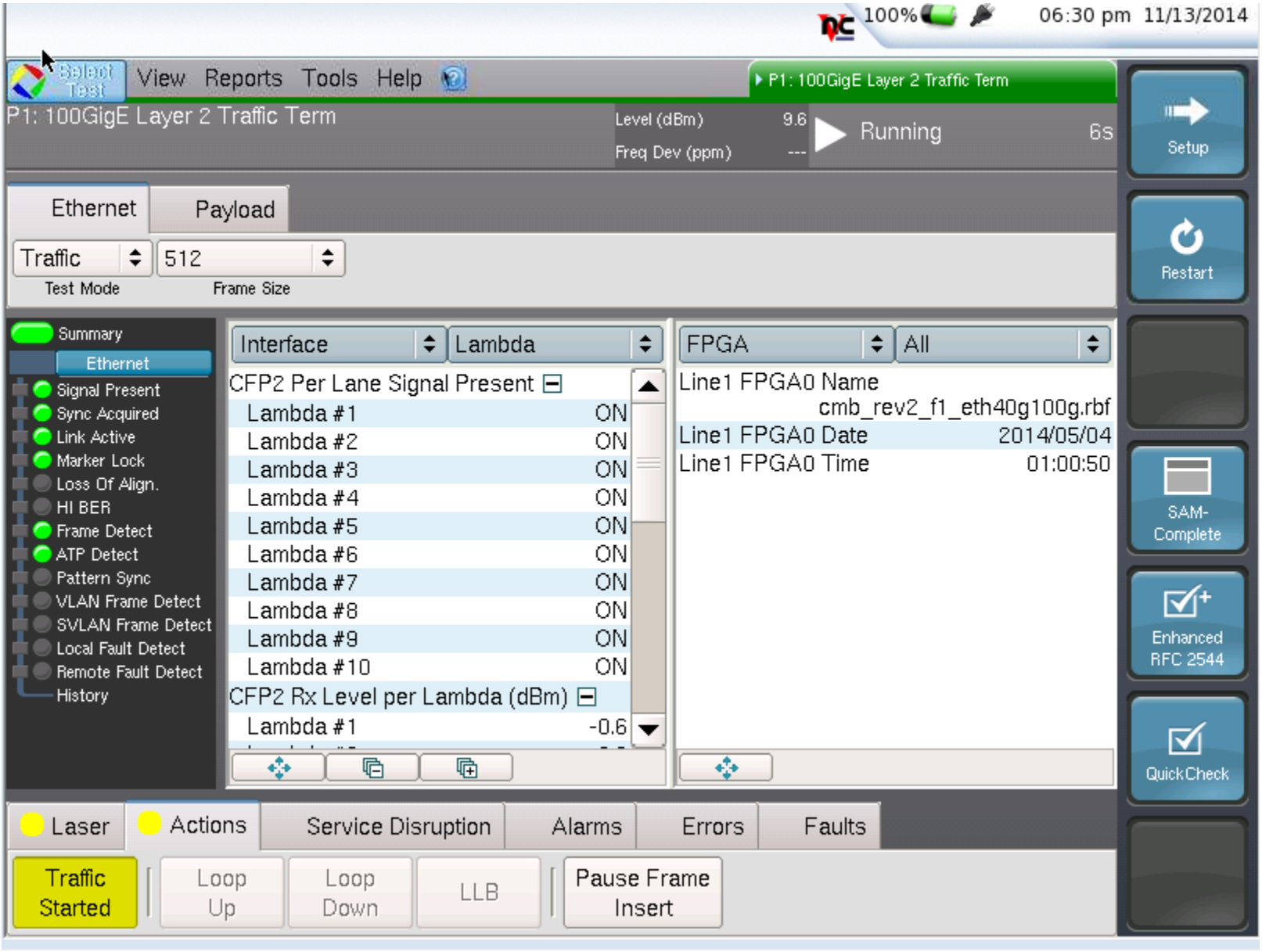
Lambda #2 ON
Lambda #3 ON
Lambda #4 ON
Lambda #5 ON
Lambda #6 ON
Lambda #7 ON
Lambda #8 ON
Lambda #9 ON
Lambda #10 ON
CFP2 Rx Level per Lambda (dBm)
Lambda #1 -0.6
FPGA
All
Line1 FPGA0 Name
cmb_rev2_f1_eth40g100g.rbf
Line1 FPGA0 Date 2014/05/04
Line1 FPGA0 Time 01:00:50
Laser
Actions
Service Disruption
Alarms
Errors
Faults
Traffic Started
Loop Up
Loop Down
LLB
Pause Frame Insert


100%
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Select Test
View
Reports
Tools
Help
P1: 100GigE Layer 2 Traffic Term
P1: 100GigE Layer 2 Traffic Term
Level (dBm) 9.6
Freq Dev (ppm) ---
Running
6s
Setup
Restart
SAM-Complete
Enhanced RFC 2544
QuickCheck
Ethernet
Payload
Traffic
Test Mode
512
Frame Size
Summary
Ethernet
Signal Present
Sync Acquired
Link Active
Marker Lock
Loss Of Align.
HI BER
Frame Detect
ATP Detect
Pattern Sync
VLAN Frame Detect
SVLAN Frame Detect
Local Fault Detect
Remote Fault Detect
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Lambda #1 ON
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Lambda #7 ON
Lambda #8 ON
Lambda #9 ON
Lambda #10 ON
CFP2 Rx Level per Lambda (dBm)
Lambda #1 -0.6
FPGA
All
Line1 FPGA0 Name
cmb_rev2_f1_eth40g100g.rbf
Line1 FPGA0 Date 2014/05/04
Line1 FPGA0 Time 01:00:50
Laser
Actions
Service Disruption
Alarms
Errors
Faults
Traffic Started
Loop Up
Loop Down
LLB
Pause Frame Insert