

Packet Blazer 10GigE

Job Information

Job ID	1
Contractor	
Customer	pierce-puyallup-ctc
Report Date	2020-06-12 13:23:44
Operator Name	daniel dh
Circuit ID	wave

File Name:

C:\inetpub\wwwroot\k20_performance_reports\pierce-puyallup-ctc\2020-06-12_pierce-puyallup-ctc_wave_dmz_dual-test.pdf

Comment: esam Dual test with FTB

Table of Contents

1. Setup	3
2. Summary	4
3. Optical [P1]/Port	7
4. EtherSAM Configuration	10
5. EtherSAM Results	17
6. Optical [P1]/Ethernet Framed Layer 2/Traffic Analyzer	22
7. Clock Synchronization	24
8. Software Options	26
9. Ping [P1]/Ping	27

1. Setup

1.1. Dual Test Set

Item	Value
Dual Test Set	Enabled
Dual Test Set Mode	Local

1.1.1. Remote Selection

Item	Value
IP Address	134.39.111.242
Dual Test Set Remote ID	FTB-860GL61

1.2. IPversion Status

Port	IP Version
Port1	IPv4

1.3. Transceiver Mode

Item	Value
Transceiver Mode	10GigE LAN

2. Summary

2.1. Alarm

2.1.1. Alarms

2.1.1.1. Global

Alarm	H
Global	No Fault
Log Full	No Fault

2.1.1.2. Physical

Alarm	H
LOS	No Fault
Frequency	No Fault
LOC	No Fault

Signal Analysis	Value
Pwr (dBm)	-2.6

Frequency Analysis	Value
Freq (bps)	10312534656.0
Offset (ppm)	3

2.1.1.3. WIS

No information is available

2.1.1.4. Ethernet

Alarm	H
Error	No Fault
Link	No Fault
Fault	No Fault

2.1.1.5. Higher Layer Protocol

Alarm	H
Error	No Fault

2.1.1.6. Pattern

No information is available

2.1.1.7. Other

Alarm	H
SDT	No Fault

2.1.2. Logger**2.1.2.1. Logger Events**

ID	Date/Time	Data Path	Event	Duration	Count	Rate
1	2020-06-12 13:18:57	Test 1	Test Started			
2	2020-06-12 13:23:33	Test 1	Test Stopped			

2.2. Test**2.2.1. Test Status**

Item	Value
Start Time:	2020-06-12 13:18:57
Port 1 Link	Up

2.2.2. Test Configuration

Item	Value
Application Type	EtherSAM (Y.1564)
Test Name	TEST
Test Description	

2.2.3. Test Preferences

No information is available

2.2.4. Clock Configuration

Item	Value
Clock Mode	Internal

2.2.5. Alarm Analysis

Alarm	H	Seconds
LOC	No Fault	0

2.2.6. Timer Configuration

Item	Value
Start Time Status	Disabled
Start Time	2020-06-12 13:01:35
Stop Time Status	Disabled
Stop Time	2020-06-12 13:01:35
Duration Status	Disabled
Duration	15 minutes
On/Off State	Disabled

3. Optical [P1]/Port

3.1. TX

3.1.1. Signal Analysis

Item	Value
Output Presence	Active

3.1.2. Alarm Generation

Item	Value
Type	LOS
On/Off	Disabled

3.1.3. Frequency

Item	Value
Frequency Offset (ppm)	0
On/Off	Disabled
Actual Frequency (bps)	10312499904
Nominal Frequency (bps)	10312500000

3.2. RX

3.2.1. Signal Analysis

Item	Value
Range (dBm)	-14.0 to 2.0
Power (dBm)	-2.6

3.2.2. Alarm Analysis

Alarm	H	Seconds
LOS	No Fault	0
Frequency	No Fault	0

3.2.3. Frequency Analysis

Item	Value
Frequency (bps)	10312534656
Frequency Offset (bps)	34656
Max. Negative Offset (bps)	0
Max. Positive Offset (bps)	34720

3.3. Interface

3.3.1. Configuration

Item	Value
Flow Control	None

3.3.2. Status

Item	Value
Link	Up

3.4. Network

3.4.1. MAC Configuration

Item	Value
MAC Address	00:03:01:08:9E:3D

3.4.1.1. VLAN

Item	Value
Enable VLAN	Disabled

3.4.2. IP Configuration

Item	Value
IP Address	68.179.209.230
Subnet Mask	255.255.255.254
Enable DHCP	Disabled
Enable Default Gateway	Enabled
Default Gateway	68.179.209.231

3.4.3. Frame Format

Item	Value
Format	Ethernet II
OUI	N/A

4. EtherSAM Configuration

4.1. Overview

4.1.1. EtherSAM Configuration Overview

Service	Profile	Enabled	Service Name	Frame Size	Direction	CIR (Mbps)	Max Jitter (ms)	Max Latency (ms)	Frame Loss (%)	CBS (Bytes)
1	Data	Enabled	Service 1	Random	Local to remote	925.0	2	28	0.1	N/A
1	Data	Enabled	Service 1	Random	Remote to local	925.0	2		0.1	N/A
2	Data	Disabled	Service 2	78	Local to remote	5000.0	2	15	0.1	N/A
2	Data	Disabled	Service 2	78	Remote to local	500.0	2		0.1	N/A
3	Data	Disabled	Service 3	78	Local to remote	5000.0	2	15	0.1	N/A
3	Data	Disabled	Service 3	78	Remote to local	500.0	2		0.1	N/A
4	Data	Disabled	Service 4	78	Local to remote	5000.0	2	15	0.1	N/A
4	Data	Disabled	Service 4	78	Remote to local	500.0	2		0.1	N/A
5	Data	Disabled	Service 5	78	Local to remote	5000.0	2	15	0.1	N/A
5	Data	Disabled	Service 5	78	Remote to local	500.0	2		0.1	N/A
6	Data	Disabled	Service 6	78	Local to remote	5000.0	2	15	0.1	N/A
6	Data	Disabled	Service 6	78	Remote to local	500.0	2		0.1	N/A
7	Data	Disabled	Service 7	78	Local to remote	5000.0	2	15	0.1	N/A
7	Data	Disabled	Service 7	78	Remote to local	500.0	2		0.1	N/A
8	Data	Disabled	Service 8	78	Local to remote	5000.0	2	15	0.1	N/A
8	Data	Disabled	Service 8	78	Remote to local	500.0	2		0.1	N/A
9	Data	Disabled	Service 9	78	Local to remote	5000.0	2	15	0.1	N/A
9	Data	Disabled	Service 9	78	Remote to local	500.0	2		0.1	N/A
10	Data	Disabled	Service 10	78	Local to remote	5000.0	2	15	0.1	N/A
10	Data	Disabled	Service 10	78	Remote to local	500.0	2		0.1	N/A

4.1.2. Global Verdict**4.1.3. Enable Sub-Tests**

Item	Value
Service Configuration Test	Enabled
Ramp Test	Enabled
Burst Test	Disabled
Service Performance Test	Enabled

4.1.4. Sub-Tests Duration

Item	Duration
Service Configuration Test	00d:00:00:20
Service Performance Test	00d:00:10:00

4.1.5. Total TX Rate (%)

Item	Local	Remote
Available	90.75	7.5
Committed	9.25	92.5

4.2. Services**4.2.1. Service 1**

4.2.1.1. SLA Parameters

Item	Direction	Value
CIR (Mbit/s)	Local to remote	925.0
CIR (Mbit/s)	Remote to local	925.0
CIR+EIR (Mbit/s)	N/A	N/A
CIR+EIR (Mbit/s)	N/A	N/A
Traffic Policing (Mbit/s)	N/A	N/A
Traffic Policing (Mbit/s)	N/A	N/A
CBS (Bytes)	N/A	N/A
CBS (Bytes)	N/A	N/A
EBS (Bytes)	N/A	N/A
EBS (Bytes)	N/A	N/A
Burst Max Rate (Mbit/s)	N/A	N/A
Burst Max Rate (Mbit/s)	N/A	N/A
Max Jitter (ms)	Local to remote	2
Max Jitter (ms)	Remote to local	2
Max Latency (ms)	Local to remote	28
Frame Loss (%)	Local to remote	0.1
Frame Loss (%)	Remote to local	0.1

4.2.1.2. Local to remote**4.2.1.2.1. Frame Configuration****4.2.1.2.1.1. Service Profile**

Item	Value
Profile Type	Data

4.2.1.2.1.2. Frame Configuration

Item	Value	Size
Data Link	Ethernet II	Random
Network	IPv4	Random
Transport	UDP	Random

4.2.1.2.2. MAC

4.2.1.2.2.1. Source

Item	Value
MAC Address	00:03:01:08:9E:3D

4.2.1.2.2.2. Destination

Item	Value
MAC Address	B0:8B:CF:56:8F:BF
Resolve MAC Address	Enabled
Status	Resolved

4.2.1.2.2.2.1. VLAN

Item	Value
Enable VLAN	Disabled

4.2.1.2.2.3. Frame Format

Item	Value
Format	Ethernet II
OUI	N/A
User Defined OUI	N/A
EtherType	0800

4.2.1.2.3. IP**4.2.1.2.3.1. Source**

Item	Value
IP Address	68.179.209.230
Subnet Mask	255.255.255.254

4.2.1.2.3.1.1. IP Multiplier

Item	Value
Enable	Disabled
Range	N/A

4.2.1.2.3.2. Destination

Item	Value
IP Address	134.39.111.242
TTL	128
IP TOS/DS	00

4.2.1.2.3.2.1. Advanced TOS/DS

Item	Value
Enable Differentiated Services	Disabled

4.2.1.2.3.2.1.1. DS

No information is available

4.2.1.2.3.2.1.2. TOS

Item	Value
Precedence	000 (Routine)
Delay	Normal
Throughput	Normal
Reliability	Normal
Monetary Cost	Normal
Reserved Bit	0

4.2.1.2.3.2.2. Default Gateway

Item	Value
Enable	Enabled
Default Gateway	68.179.209.231

4.2.1.2.4. UDP**4.2.1.2.4.1. Source**

Item	Value
Port	49184

4.2.1.2.4.2. Destination

Item	Value
Port	7

4.2.1.2.5. Payload

No information is available

4.2.1.3. Remote to local**4.2.1.3.1. VLAN**

Item	Value
Enable VLAN	Disabled

4.3. Ramp

Step List	Value (% of CIR)
Step Time (s)	5
Ramp Duration (s)	25

Step1 (%)	50.0
Step2 (%)	75.0
Step3 (%)	90.0
Step4	CIR
Step5	Traffic Policing

4.4. Burst

Item	Value
Number of Burst Sequence	2
Refill Delay Ratio (%)	50
Burst/IR Frame Ratio (%)	90

4.4.1. Burst Test

Service No.	Direction	CBS Test Time (s)	EBS Test Time (s)	Total Burst Test Time (s)
1	Local to remote	N/A	N/A	--
1	Remote to local	N/A	N/A	--
2	Local to remote	N/A	N/A	--
2	Remote to local	N/A	N/A	--
3	Local to remote	N/A	N/A	--
3	Remote to local	N/A	N/A	--
4	Local to remote	N/A	N/A	--
4	Remote to local	N/A	N/A	--
5	Local to remote	N/A	N/A	--
5	Remote to local	N/A	N/A	--
6	Local to remote	N/A	N/A	--
6	Remote to local	N/A	N/A	--
7	Local to remote	N/A	N/A	--
7	Remote to local	N/A	N/A	--
8	Local to remote	N/A	N/A	--
8	Remote to local	N/A	N/A	--
9	Local to remote	N/A	N/A	--
9	Remote to local	N/A	N/A	--
10	Local to remote	N/A	N/A	--
10	Remote to local	N/A	N/A	--
Total	Local to remote	0	0	0
Total	Remote to local	0	0	0

5. EtherSAM Results

5.1. Overview

5.1.1. Global Progress

Item	Value
Test Status	Completed
Verdict	PASS

5.1.2. Configuration Test Overview

5.1.2.1. Service 1

Item	Direction	Value	Verdict
Frame Loss (%)	Remote-to-Local	0.000	PASS
Frame Loss (%)	Local-to-Remote	0.000	PASS
Max Jitter (ms)	Remote-to-Local	0.055	PASS
Max Jitter (ms)	Local-to-Remote	0.049	PASS
Max Latency (ms)	Both	3.878	PASS
Max RX Rate (Mbit/s)	Remote-to-Local	924.999	PASS
Max RX Rate (Mbit/s)	Local-to-Remote	924.997	PASS

5.1.3. Performance Test Overview

5.1.3.1. Service 1

Item	Direction	Value	Verdict
Average RX Rate (Mbps)	Remote-to-Local	925.002	PASS
Average RX Rate (Mbps)	Local-to-Remote	924.997	PASS
Frame Loss (%)	Remote-to-Local	0.000	PASS
Frame Loss (%)	Local-to-Remote	0.000	PASS
Max Jitter (ms)	Remote-to-Local	0.043	PASS
Max Jitter (ms)	Local-to-Remote	0.047	PASS
Max Latency (ms)	Both	4.021	PASS
Verdict	Both	PASS	PASS

5.2. Service Configuration Test

5.2.1. Service 1

5.2.1.1. Service Verdict

Item	Verdict
Service Verdict	PASS

5.2.1.2. Max RX Rate

Item	Direction	Value	Verdict
Max RX Rate (Mbit/s)	Remote-to-Local	924.999	PASS
Max RX Rate (Mbit/s)	Local-to-Remote	924.997	PASS

5.2.1.3. Step 1

Item	Direction	Value	Verdict
Percentage of CIR	Both	50.0	Not Applicable
Frame Loss (%)	Remote-to-Local	0.000	PASS
Frame Loss (%)	Local-to-Remote	0.000	PASS
Max Jitter (ms)	Remote-to-Local	0.055	PASS
Max Jitter (ms)	Local-to-Remote	0.049	PASS
Max Latency (ms)	Both	3.878	PASS
Verdict	Both	PASS	PASS
Average RX Rate (Mbps)	Remote-to-Local	462.501	N/A
Average RX Rate (Mbps)	Local-to-Remote	462.498	N/A

5.2.1.4. Step 2

Item	Direction	Value	Verdict
Percentage of CIR	Both	75.0	Not Applicable
Frame Loss (%)	Remote-to-Local	0.000	PASS
Frame Loss (%)	Local-to-Remote	0.000	PASS
Max Jitter (ms)	Remote-to-Local	0.044	PASS
Max Jitter (ms)	Local-to-Remote	0.044	PASS
Max Latency (ms)	Both	3.877	PASS
Verdict	Both	PASS	PASS
Average RX Rate (Mbps)	Remote-to-Local	693.754	N/A
Average RX Rate (Mbps)	Local-to-Remote	693.747	N/A

5.2.1.5. Step 3

Item	Direction	Value	Verdict
Percentage of CIR	Both	90.0	Not Applicable
Frame Loss (%)	Remote-to-Local	0.000	PASS
Frame Loss (%)	Local-to-Remote	0.000	PASS
Max Jitter (ms)	Remote-to-Local	0.043	PASS
Max Jitter (ms)	Local-to-Remote	0.043	PASS
Max Latency (ms)	Both	3.870	PASS
Verdict	Both	PASS	PASS
Average RX Rate (Mbps)	Remote-to-Local	832.502	N/A
Average RX Rate (Mbps)	Local-to-Remote	832.498	N/A

5.2.1.6. Step CIR

Item	Direction	Value	Verdict
Frame Loss (%)	Remote-to-Local	0.000	PASS
Frame Loss (%)	Local-to-Remote	0.000	PASS
Max Jitter (ms)	Remote-to-Local	0.041	PASS
Max Jitter (ms)	Local-to-Remote	0.037	PASS
Max Latency (ms)	Both	3.876	PASS
Verdict	Both	PASS	PASS
Average RX Rate (Mbps)	Remote-to-Local	924.999	N/A
Average RX Rate (Mbps)	Local-to-Remote	924.997	N/A

5.3. Service Performance Test**5.3.1. Remote-to-Local****5.3.1.1. Service 1****5.3.1.1.1. Sequence Tracking**

Error	H	Seconds	Count	Rate	Percentage
Out-Of-Sequence	No Fault	0	0	0.00E00	0.000
Frame Loss	No Fault	0	0	0.00E00	0.000

5.3.1.1.2. RX Rate

Item	Value
Minimum (%)	9.249
Maximum (%)	9.25
Current (%)	9.25
Average (%)	9.25
RX Frame Count	30452787

5.3.1.1.3. Round Trip Latency

Item	Value
Minimum (ms)	3.789
Maximum (ms)	4.021
Current (ms)	3.813
Average (ms)	3.819

5.3.1.1.4. Jitter

Item	Value
Minimum (ms)	< 0.015
Maximum (ms)	0.043
Current (ms)	< 0.015
Average (ms)	< 0.015
Number of Samples	29864871
Estimate (ms)	< 0.015

5.3.2. Local-to-Remote**5.3.2.1. Service 1****5.3.2.1.1. Sequence Tracking**

Error	H	Seconds	Count	Rate	Percentage
Out-Of-Sequence	No Fault	0	0	0.00E00	0.000
Frame Loss	No Fault	0	0	0.00E00	0.000

5.3.2.1.2. RX Rate

Item	Value
Minimum (%)	92.498
Maximum (%)	92.501
Current (%)	92.499
Average (%)	92.499
RX Frame Count	30430331

5.3.2.1.3. Jitter

Item	Value
Minimum (ms)	< 0.015
Maximum (ms)	0.047
Current (ms)	< 0.015
Average (ms)	< 0.015
Number of Samples	29943798
Estimate (ms)	< 0.015

6. Optical [P1]/Ethernet Framed Layer 2/Traffic Analyzer

6.1. Eth. RX

6.1.1. Configuration

Item	Value
Oversize Monitoring	Disabled

6.1.2. Alarm Analysis

Alarm	H	Seconds
Link Down	No Fault	0
Local Fault	No Fault	0
Remote Fault	No Fault	0

6.1.3. Error Analysis

Error	H	Seconds	Count	Rate
Block	No Fault	0	0	0.00E00
FCS	No Fault	0	0	0.00E00
Jabber/Giant	No Fault	0	0	0.00E00
Oversize	N/A	N/A	N/A	N/A
Runt	No Fault	0	0	0.00E00
Undersize	No Fault	0	0	0.00E00
Total Error Count			0	

6.2. Eth. Stats

6.2.1. Total Frame Counts

	RX Count	TX Count
Total Count	32694614	32674028

6.2.2. Valid Frame Counts

Frames	TX Count	RX Count
Multicast	0	72
Broadcast	2	0
Unicast	32674026	32694542
N-Unicast	2	72
Total	32674028	32694614

6.2.3. Frame Size

Frame Size	Count	Total (%)
< 64	0	0.000
64	378	0.001
65 - 127	1350617	4.131
128 - 255	2883078	8.818
256 - 511	5766345	17.637
512 - 1023	11536260	35.285
1024 - 1518	11157936	34.128
> 1518	0	0.000

6.2.4. Throughput

Item	Value
Bandwidth (Mbps)	902.281128
Utilization (%)	9.24997128
Frame Rate (fps)	141975

6.3. Higher Layers**6.3.1. Higher Layer Protocol**

Error	H	Seconds	Count	Rate
IP Header Checksum	No Fault	0	0	0.00E00
UDP Checksum	No Fault	0	0	0.00E00
TCP Checksum	No Fault	0	0	--

7. Clock Synchronization

7.1. RX

7.1.1. Configuration

Item	Value
Interface Type	None
Termination Mode	N/A
Line Coding	N/A
Framing	N/A

7.1.2. Alarm Analysis

Alarm	State
LOS	N/A
AIS	N/A
LOF	N/A
Frequency	N/A

7.1.3. Frequency Analysis

Item	Value
Frequency (bps)	--
Frequency Offset (ppm)	--

7.2. Backplane

7.2.1. Configuration

Item	Value
Clock Mode	Internal
Enable	Disabled

7.2.2. Alarm Analysis

Alarm	State
LOC	No Fault

7.3. Clock Out

7.3.1. Configuration

Item	Value
Clock Out Divider	16

8. Software Options

8.1. Available Options

Category	Name	Description	Status
Feature	SK-ADV-FILTERS	Advanced Traffic Filtering	Enabled
Feature	SK-DATA-CAPTURE	Ethernet Frame Capture for Advanced Troubleshooting	Disabled
Feature	SK-ETHERSAM	Ethernet Service Activation Methodology Application Type	Enabled
Feature	SK-IPV6	Internet Protocol Version 6 (IPv6)	Disabled
Feature	SK-MPLS	Multi Protocol Label Switching	Disabled
Feature	SK-PBB-TE	Provider Backbone Bridge with Traffic Engineering	Disabled
Feature	SK-TRAFFIC-SCAN	Traffic Scan Troubleshooting Feature	Disabled
Network	SK-LAN	Local Area Network	Enabled
Network	SK-WAN	Wide Area Network	Enabled

9. Ping [P1]/Ping

9.1. Configuration

9.1.1. Ping

9.1.1.1. Setup

Item	Value
IP Address	68.179.209.231
Run	Disabled

9.1.1.1.1. Configuration

Item	Value
Timeout (ms)	4000
Delay (ms)	1000
Data Size (Bytes)	32
Time To Live (TTL)	128
Attempts	4
Continuous	Disabled
Type Of Service (TOS)	00

9.1.1.2. Results

#	Status	Replied From	Bytes	Time (ms)	TTL
1	Successful	134.39.111.242	32	6	126
2	Successful	134.39.111.242	32	6	126
3	Successful	134.39.111.242	32	6	126
4	Successful	134.39.111.242	32	7	126

9.1.1.2.1. Statistics

Item	Value
TX (packets)	4
RX (packets)	4
Lost (%)	0
Minimum Round Trip Time (ms)	6
Maximum Round Trip Time (ms)	7
Average Round Trip Time (ms)	6

9.1.2. TraceRoute

9.1.2.1. Setup

Item	Value
IP Address	68.179.209.231
Run	Disabled

9.1.2.1.1. Configuration

Item	Value
Timeout (ms)	4000
Max. Hop Count	128

9.1.2.2. Results

No information is available

9.1.2.2.1. Statistics

No information is available