



## Packet Blazer 10GigE

### Job Information

Job ID	1
Contractor	University of Washington
Customer	anacortes-k12
Report Date	2018-11-15 17:01:04
Operator Name	danielh
Circuit ID	Comcast:61.KFGS.025909..CBCL..

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Comment:

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## 1. Setup

### 1.1. IPversion Status

Port	IP Version
Port1	IPv4

### 1.2. 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)	-1.8

Frequency Analysis	Value
Freq (bps)	10312524864.0
Offset (ppm)	2

##### 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	2018-11-15 16:48:04	Test 1	Test Started			
2	2018-11-15 16:58:51	Test 1	Test Stopped			

**2.2. Test****2.2.1. Test Status**

Item	Value
Start Time:	2018-11-15 16:48:04
Port 1 Link	Up

**2.2.2. Test Configuration**

Item	Value
Application Type	EtherSAM (Y.1564)
Test Name	BV10.EtS
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	2015-07-20 12:19:45
Stop Time Status	Disabled
Stop Time	2015-07-20 12:19:45
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)	-1.8

##### 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)	10312524864
Frequency Offset (bps)	24864
Max. Negative Offset (bps)	0
Max. Positive Offset (bps)	24928

**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	10.10.114.173
Subnet Mask	255.255.255.0
Enable DHCP	Disabled
Enable Default Gateway	Disabled
Default Gateway	N/A

**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	Enable	Service Name	Frame Size	CIR (Mbps)	Max Jitter (ms)	Max Latency (ms)	Frame Loss (%)	CBS (Bytes)
1	Data	Enabled	2Gb CIR	Random	1900.0	2	28	0.01	N/A
2	Data	Disabled	Service 2	74	5000.0	2	15	0.1	N/A
3	Data	Disabled	Service 3	74	5000.0	2	15	0.1	N/A
4	Data	Disabled	Service 4	74	5000.0	2	15	0.1	N/A
5	Data	Disabled	Service 5	74	5000.0	2	15	0.1	N/A
6	Data	Disabled	Service 6	74	5000.0	2	15	0.1	N/A
7	Data	Disabled	Service 7	74	5000.0	2	15	0.1	N/A
8	Data	Disabled	Service 8	74	5000.0	2	15	0.1	N/A
9	Data	Disabled	Service 9	74	5000.0	2	15	0.1	N/A
10	Data	Disabled	Service 10	74	5000.0	2	15	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	Value
Available	81.0
Committed	19.0

**4.2. Services****4.2.1. 2Gb CIR****4.2.1.1. SLA Parameters**

Item	Value
CIR (Mbit/s)	1900.0
CIR+EIR (Mbit/s)	N/A
Traffic Policing (Mbit/s)	N/A
CBS (Bytes)	N/A
EBS (Bytes)	N/A
Burst Max Rate (Mbit/s)	N/A
Max Jitter (ms)	2
Max Latency (ms)	28
Frame Loss (%)	0.01

**4.2.1.2. Frame Configuration****4.2.1.2.1. Service Profile**

Item	Value
Profile Type	Data

**4.2.1.2.2. Frame Configuration**

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

**4.2.1.3. MAC****4.2.1.3.1. Source**

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

**4.2.1.3.2. Destination**

Item	Value
MAC Address	00:03:01:FE:E4:BD
Resolve MAC Address	Enabled
Status	Resolved

**4.2.1.3.2.1. VLAN**

Item	Value
Enable VLAN	Disabled

**4.2.1.3.3. Frame Format**

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

**4.2.1.4. MPLS Configuration**

Item	Value
Label #2	N/A
COS / EXP #2	N/A
TTL #2	N/A

**4.2.1.5. IP****4.2.1.5.1. Source**

Item	Value
IP Address	10.112.0.01
Subnet Mask	255.255.255.0

**4.2.1.5.1.1. IP Multiplier**

Item	Value
Enable	Disabled
Range	N/A

**4.2.1.5.2. Destination**

Item	Value
IP Address	10.112.0.102
TTL	128
IP TOS/DS	00

**4.2.1.5.2.1. Advanced TOS/DS**

Item	Value
Enable Differentiated Services	Disabled

**4.2.1.5.2.1.1. DS**

No information is available

**4.2.1.5.2.1.2. TOS**

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

**4.2.1.5.2.2. Default Gateway**

Item	Value
Enable	Disabled
Default Gateway	N/A

**4.2.1.6. UDP****4.2.1.6.1. Source**

Item	Value
Port	49184

**4.2.1.6.2. Destination**

Item	Value
Port	7

**4.2.1.7. Payload**

No information is available

**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.	CBS Test Time (s)	EBS Test Time (s)	Total Burst Test Time (s)
1	N/A	N/A	--
2	N/A	N/A	--
3	N/A	N/A	--
4	N/A	N/A	--
5	N/A	N/A	--
6	N/A	N/A	--
7	N/A	N/A	--
8	N/A	N/A	--
9	N/A	N/A	--
10	N/A	N/A	--
Total	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. 2Gb CIR

Item	Value	Verdict
Frame Loss (%)	0.000	PASS
Max Jitter (ms)	0.020	PASS
Max Latency (ms)	4.523	PASS
Max RX Rate (Mbit/s)	1900.001	PASS

#### 5.1.3. Performance Test Overview

##### 5.1.3.1. 2Gb CIR

Item	Value	Verdict
Average RX Rate (Mbps)	1899.999	PASS
Frame Loss (%)	0.000	PASS
Max Jitter (ms)	0.020	PASS
Max Latency (ms)	4.526	PASS
Verdict	PASS	PASS

## 5.2. Service Configuration Test

### 5.2.1. 2Gb CIR

#### 5.2.1.1. Service Verdict

Item	Verdict
Service Verdict	PASS



**5.2.1.2. Max RX Rate**

Item	Value	Verdict
Max RX Rate (Mbit/s)	1900.001	PASS

**5.2.1.3. Step 1**

Item	Value	Verdict
Percentage of CIR	50.0	Not Applicable
Frame Loss (%)	0.000	PASS
Max Jitter (ms)	0.020	PASS
Max Latency (ms)	4.518	PASS
Verdict	PASS	PASS
Average RX Rate (Mbps)	949.999	N/A

**5.2.1.4. Step 2**

Item	Value	Verdict
Percentage of CIR	75.0	Not Applicable
Frame Loss (%)	0.000	PASS
Max Jitter (ms)	0.019	PASS
Max Latency (ms)	4.522	PASS
Verdict	PASS	PASS
Average RX Rate (Mbps)	1425.001	N/A

**5.2.1.5. Step 3**

Item	Value	Verdict
Percentage of CIR	90.0	Not Applicable
Frame Loss (%)	0.000	PASS
Max Jitter (ms)	0.016	PASS
Max Latency (ms)	4.523	PASS
Verdict	PASS	PASS
Average RX Rate (Mbps)	1710.002	N/A

**5.2.1.6. Step CIR**

Item	Value	Verdict
Frame Loss (%)	0.000	PASS
Max Jitter (ms)	0.018	PASS
Max Latency (ms)	4.522	PASS
Verdict	PASS	PASS
Average RX Rate (Mbps)	1900.001	N/A

**5.3. Service Performance Test****5.3.1. Port 1****5.3.1.1. 2Gb CIR****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 (%)	18.999
Maximum (%)	19
Current (%)	18.999
Average (%)	18.999
RX Frame Count	175775283

**5.3.1.1.3. Round Trip Latency**

Item	Value
Minimum (ms)	4.495
Maximum (ms)	4.526
Current (ms)	4.505
Average (ms)	4.506

**5.3.1.1.4. Jitter**

Item	Value
Minimum (ms)	< 0.015
Maximum (ms)	0.021
Current (ms)	< 0.015
Average (ms)	< 0.015
Number of Samples	175018368
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	180389228	180389216

**6.2.2. Valid Frame Counts**

Frames	TX Count	RX Count
Multicast	0	23
Broadcast	11	0
Unicast	180389205	180389205
N-Unicast	11	23
Total	180389216	180389228

**6.2.3. Frame Size**

Frame Size	Count	Total (%)
< 64	0	0.000
64	127843	0.071
65 - 127	7829450	4.340
128 - 255	15869038	8.797
256 - 511	31723030	17.586
512 - 1023	63461200	35.180
1024 - 1518	61378667	34.026
> 1518	0	0.000

**6.2.4. Throughput**

Item	Value
Bandwidth (Mbps)	0.0
Utilization (%)	0.0
Frame Rate (fps)	0

**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	10.10.114.172
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

No information is available

##### 9.1.1.2.1. Statistics

No information is available

#### 9.1.2. TraceRoute

##### 9.1.2.1. Setup

Item	Value
IP Address	10.10.114.172
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