

## Packet Blazer 10GigE

### Job Information

|               |                          |
|---------------|--------------------------|
| Job ID        | 1                        |
| Contractor    | University of Washington |
| Customer      | wishram-k12              |
| Report Date   | 2020-01-09 12:21:06      |
| Operator Name | danielh                  |
| Circuit ID    | StarTouch:wiswes2110917  |

File Name: C:\inetpub\wwwroot\k20\_performance\_reports\wishram-k12\2020-01-09\_wishram-k12\_failed.pdf

Comment: failed packet loss and latency

**Table of Contents**

|                                                                |    |
|----------------------------------------------------------------|----|
| 1. Setup .....                                                 | 3  |
| 2. Summary .....                                               | 4  |
| 3. Optical [P1]/Port .....                                     | 10 |
| 4. EtherSAM Configuration .....                                | 13 |
| 5. EtherSAM Results .....                                      | 19 |
| 6. Optical [P1]/Ethernet Framed Layer 2/Traffic Analyzer ..... | 23 |
| 7. Clock Synchronization .....                                 | 25 |
| 8. Software Options .....                                      | 27 |

## 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   | 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)       | -3.6  |

| Frequency Analysis | Value         |
|--------------------|---------------|
| Freq (bps)         | 10312517184.0 |
| Offset (ppm)       | 2             |

##### 2.1.1.3. WIS

No information is available

##### 2.1.1.4. Ethernet

| Alarm | H        |
|-------|----------|
| Error | 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  | 2020-01-09<br>12:17:03 | Test 1                                                             | Test Started |          |       |          |
| 2  | 2020-01-09<br>12:18:17 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream [P4]/Stream[4] | Frame Loss   | Pending. |       |          |
| 3  | 2020-01-09<br>12:18:17 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream [P2]/Stream[2] | Frame Loss   | Pending. |       |          |
| 4  | 2020-01-09<br>12:18:17 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]      | Frame Loss   | Pending. |       |          |
| 5  | 2020-01-09<br>12:18:17 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream [P3]/Stream[3] | Frame Loss   | Pending. |       |          |
| 6  | 2020-01-09<br>12:18:26 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]      | Frame Loss   | 00:00:04 | 112   | 2.04E-04 |
| 7  | 2020-01-09<br>12:18:33 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]      | Frame Loss   | 00:00:04 | 164   | 2.60E-04 |
| 8  | 2020-01-09<br>12:18:38 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]      | Frame Loss   | 00:00:02 | 39    | 2.45E-04 |
| 9  | 2020-01-09<br>12:18:42 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]      | Frame Loss   | 00:00:01 | 3     | 2.11E-04 |
| 10 | 2020-01-09<br>12:18:44 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]      | Frame Loss   | 00:00:01 | 20    | 2.05E-04 |
| 11 | 2020-01-09<br>12:18:47 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]      | Frame Loss   | 00:00:01 | 30    | 1.97E-04 |
| 12 | 2020-01-09<br>12:18:49 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]      | Frame Loss   | 00:00:01 | 36    | 2.00E-04 |
| 13 | 2020-01-09<br>12:18:51 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]      | Frame Loss   | 00:00:01 | 7     | 1.90E-04 |
| 14 | 2020-01-09<br>12:18:54 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]      | Frame Loss   | 00:00:02 | 43    | 1.85E-04 |
| 15 | 2020-01-09<br>12:18:57 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]      | Frame Loss   | 00:00:01 | 27    | 1.85E-04 |
| 16 | 2020-01-09<br>12:18:59 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]      | Frame Loss   | 00:00:02 | 28    | 1.80E-04 |
| 17 | 2020-01-09<br>12:19:02 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]      | Frame Loss   | 00:00:02 | 18    | 1.73E-04 |
| 18 | 2020-01-09<br>12:19:05 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1]      | Frame Loss   | 00:00:01 | 3     | 1.66E-04 |

|    |                        |                                                               |            |          |     |          |
|----|------------------------|---------------------------------------------------------------|------------|----------|-----|----------|
| 19 | 2020-01-09<br>12:19:07 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss | 00:00:01 | 18  | 1.64E-04 |
| 20 | 2020-01-09<br>12:19:09 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss | 00:00:02 | 37  | 1.64E-04 |
| 21 | 2020-01-09<br>12:19:13 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss | 00:00:01 | 15  | 1.59E-04 |
| 22 | 2020-01-09<br>12:19:15 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss | 00:00:08 | 181 | 1.76E-04 |
| 23 | 2020-01-09<br>12:19:27 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss | 00:00:01 | 9   | 1.64E-04 |
| 24 | 2020-01-09<br>12:19:36 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss | 00:00:01 | 12  | 1.47E-04 |
| 25 | 2020-01-09<br>12:19:38 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss | 00:00:01 | 6   | 1.44E-04 |
| 26 | 2020-01-09<br>12:19:40 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss | 00:00:04 | 135 | 1.58E-04 |
| 27 | 2020-01-09<br>12:19:47 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss | 00:00:01 | 27  | 1.54E-04 |
| 28 | 2020-01-09<br>12:19:50 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss | 00:00:03 | 69  | 1.56E-04 |
| 29 | 2020-01-09<br>12:19:56 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss | 00:00:05 | 157 | 1.65E-04 |
| 30 | 2020-01-09<br>12:20:02 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss | 00:00:01 | 15  | 1.64E-04 |
| 31 | 2020-01-09<br>12:20:06 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss | 00:00:01 | 5   | 1.58E-04 |
| 32 | 2020-01-09<br>12:20:12 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss | 00:00:01 | 3   | 1.50E-04 |
| 33 | 2020-01-09<br>12:20:14 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss | 00:00:02 | 9   | 1.47E-04 |
| 34 | 2020-01-09<br>12:20:20 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss | 00:00:02 | 83  | 1.49E-04 |
| 35 | 2020-01-09<br>12:20:24 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss | 00:00:02 | 44  | 1.49E-04 |
| 36 | 2020-01-09<br>12:20:37 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss | 00:00:01 | 10  | 1.37E-04 |
| 37 | 2020-01-09<br>12:20:50 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss | 00:00:04 | 162 | 1.37E-04 |

|    |                        |                                                               |              |          |     |          |
|----|------------------------|---------------------------------------------------------------|--------------|----------|-----|----------|
| 38 | 2020-01-09<br>12:20:55 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss   | 00:00:01 | 55  | 1.40E-04 |
| 39 | 2020-01-09<br>12:21:00 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss   | 00:00:01 | 3   | 1.36E-04 |
| 40 | 2020-01-09<br>12:21:02 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss   | 00:00:03 | 13  | 1.34E-04 |
| 41 | 2020-01-09<br>12:21:06 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss   | 00:00:03 | 20  | 1.32E-04 |
| 42 | 2020-01-09<br>12:21:10 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss   | 00:00:02 | 142 | 1.41E-04 |
| 43 | 2020-01-09<br>12:21:22 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss   | 00:00:01 | 35  | 1.35E-04 |
| 44 | 2020-01-09<br>12:21:25 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss   | 00:00:02 | 112 | 1.41E-04 |
| 45 | 2020-01-09<br>12:21:28 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss   | 00:00:01 | 7   | 1.40E-04 |
| 46 | 2020-01-09<br>12:21:32 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss   | 00:00:01 | 9   | 1.37E-04 |
| 47 | 2020-01-09<br>12:21:34 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss   | 00:00:07 | 96  | 1.38E-04 |
| 48 | 2020-01-09<br>12:21:45 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss   | 00:00:01 | 8   | 1.36E-04 |
| 49 | 2020-01-09<br>12:21:47 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss   | 00:00:01 | 2   | 1.34E-04 |
| 50 | 2020-01-09<br>12:21:49 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss   | 00:00:01 | 25  | 1.35E-04 |
| 51 | 2020-01-09<br>12:21:53 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss   | 00:00:07 | 153 | 1.38E-04 |
| 52 | 2020-01-09<br>12:22:03 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss   | 00:00:01 | 1   | 1.36E-04 |
| 53 | 2020-01-09<br>12:22:05 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss   | 00:00:01 | 12  | 1.35E-04 |
| 54 | 2020-01-09<br>12:22:07 | Optical [P1]/Ethernet Framed Layer 2/Traffic Stream/Stream[1] | Frame Loss   | Pending. |     |          |
| 55 | 2020-01-09<br>12:22:13 | Test 1                                                        | Test Stopped |          |     |          |

## 2.2. Test



**2.2.1. Test Status**

| Item        | Value               |
|-------------|---------------------|
| Start Time: | 2020-01-09 12:17:03 |
| 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) | -14.4 to 0.5 |
| Power (dBm) | -3.6         |

##### 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)            | 10312517184 |
| Frequency Offset (bps)     | 17184       |
| Max. Negative Offset (bps) | 0           |
| Max. Positive Offset (bps) | 17376       |

## 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 | 00:03:01:08:9D:91 |

#### 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 | Enabled  | Service Name | Frame Size | CIR (Mbps) | Max Jitter (ms) | Max Latency (ms) | Frame Loss (%) | CBS (Bytes) |
|---------|---------|----------|--------------|------------|------------|-----------------|------------------|----------------|-------------|
| 1       | Data    | Enabled  | 500Mb CIR    | Random     | 475.0      | 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:00:01:00 |
| Service Performance Test   | 00d:00:10:00 |

**4.1.5. Total TX Rate (%)**

| Item      | Value |
|-----------|-------|
| Available | 95.25 |
| Committed | 4.75  |

**4.2. Services****4.2.1. 500Mb CIR****4.2.1.1. SLA Parameters**

| Item                      | Value |
|---------------------------|-------|
| CIR (Mbit/s)              | 475.0 |
| 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 | 00:03:01:08:9D:91 |

**4.2.1.3.2. Destination**

| Item                | Value             |
|---------------------|-------------------|
| MAC Address         | 00:03:01:10:2D:46 |
| 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 | 10.112.0.31 |
| 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)     | 15               |
| Ramp Duration (s) | 75               |

| 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     | FAIL      |

#### 5.1.2. Configuration Test Overview

##### 5.1.2.1. 500Mb CIR

| Item                 | Value   | Verdict |
|----------------------|---------|---------|
| Frame Loss (%)       | 0.055   | FAIL    |
| Max Jitter (ms)      | 0.944   | PASS    |
| Max Latency (ms)     | 32.618  | FAIL    |
| Max RX Rate (Mbit/s) | 474.904 | PASS    |

#### 5.1.3. Performance Test Overview

##### 5.1.3.1. 500Mb CIR

| Item                   | Value   | Verdict |
|------------------------|---------|---------|
| Average RX Rate (Mbps) | 474.935 | PASS    |
| Frame Loss (%)         | 0.014   | FAIL    |
| Max Jitter (ms)        | 0.966   | PASS    |
| Max Latency (ms)       | 27.684  | PASS    |
| Verdict                | FAIL    | FAIL    |

## 5.2. Service Configuration Test

### 5.2.1. 500Mb CIR

#### 5.2.1.1. Service Verdict

| Item            | Verdict |
|-----------------|---------|
| Service Verdict | FAIL    |

**5.2.1.2. Max RX Rate**

| Item                 | Value   | Verdict |
|----------------------|---------|---------|
| Max RX Rate (Mbit/s) | 474.904 | PASS    |

**5.2.1.3. Step 1**

| Item                   | Value   | Verdict        |
|------------------------|---------|----------------|
| Percentage of CIR      | 50.0    | Not Applicable |
| Frame Loss (%)         | 0.025   | FAIL           |
| Max Jitter (ms)        | 0.903   | PASS           |
| Max Latency (ms)       | 15.059  | PASS           |
| Verdict                | FAIL    | FAIL           |
| Average RX Rate (Mbps) | 237.442 | N/A            |

**5.2.1.4. Step 2**

| Item                   | Value   | Verdict        |
|------------------------|---------|----------------|
| Percentage of CIR      | 75.0    | Not Applicable |
| Frame Loss (%)         | 0.033   | FAIL           |
| Max Jitter (ms)        | 0.944   | PASS           |
| Max Latency (ms)       | 19.290  | PASS           |
| Verdict                | FAIL    | FAIL           |
| Average RX Rate (Mbps) | 356.132 | N/A            |

**5.2.1.5. Step 3**

| Item                   | Value   | Verdict        |
|------------------------|---------|----------------|
| Percentage of CIR      | 90.0    | Not Applicable |
| Frame Loss (%)         | 0.055   | FAIL           |
| Max Jitter (ms)        | 0.843   | PASS           |
| Max Latency (ms)       | 32.618  | FAIL           |
| Verdict                | FAIL    | FAIL           |
| Average RX Rate (Mbps) | 427.265 | N/A            |

**5.2.1.6. Step CIR**

| Item                   | Value   | Verdict |
|------------------------|---------|---------|
| Frame Loss (%)         | 0.021   | FAIL    |
| Max Jitter (ms)        | 0.914   | PASS    |
| Max Latency (ms)       | 17.522  | PASS    |
| Verdict                | FAIL    | FAIL    |
| Average RX Rate (Mbps) | 474.904 | N/A     |

**5.3. Service Performance Test****5.3.1. Port 1****5.3.1.1. 500Mb 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      | Fault    | 102     | 2316  | 1.39E-04 | 0.014      |

**5.3.1.1.2. RX Rate**

| Item           | Value    |
|----------------|----------|
| Minimum (%)    | 4.706    |
| Maximum (%)    | 4.789    |
| Current (%)    | 4.749    |
| Average (%)    | 4.749    |
| RX Frame Count | 16916409 |

**5.3.1.1.3. Round Trip Latency**

| Item         | Value  |
|--------------|--------|
| Minimum (ms) | 8.007  |
| Maximum (ms) | 27.684 |
| Current (ms) | 8.294  |
| Average (ms) | 8.430  |

**5.3.1.1.4. Jitter**

| Item              | Value    |
|-------------------|----------|
| Minimum (ms)      | < 0.015  |
| Maximum (ms)      | 0.966    |
| Current (ms)      | 0.023    |
| Average (ms)      | 0.017    |
| Number of Samples | 16655305 |
| Estimate (ms)     | 0.018    |

## 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 | 20374724 | 20378072 |

**6.2.2. Valid Frame Counts**

| Frames    | TX Count | RX Count |
|-----------|----------|----------|
| Multicast | 0        | 166      |
| Broadcast | 6        | 0        |
| Unicast   | 20378066 | 20374558 |
| N-Unicast | 6        | 166      |
| Total     | 20378072 | 20374724 |

**6.2.3. Frame Size**

| Frame Size  | Count   | Total (%) |
|-------------|---------|-----------|
| < 64        | 0       | 0.000     |
| 64          | 14292   | 0.070     |
| 65 - 127    | 884184  | 4.340     |
| 128 - 255   | 1793160 | 8.801     |
| 256 - 511   | 3583957 | 17.590    |
| 512 - 1023  | 7166023 | 35.171    |
| 1024 - 1518 | 6933108 | 34.028    |
| > 1518      | 0       | 0.000     |

**6.2.4. Throughput**

| Item             | Value    |
|------------------|----------|
| Bandwidth (Mbps) | 463.2788 |
| Utilization (%)  | 4.749788 |
| Frame Rate (fps) | 73125    |

**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                               | Disabled |
| 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  |