

09/03/2019

DP83867 Packet loss and FCS errors:

Xena Ethernet packet generator/receiver (1Gig Ethernet ports)

90% transmission rate

Random packet sizes – 64-1518 bytes

Source packet – Xena will fill the packet:

DMAC = 0000.0000.0000

SMAC = 04F4.BC23.5A20

SIP = 10.10.10.1

DIP = 10.10.10.2

Ethernet - Ethernet II (14 bytes)			
MAC	DMAC Address (48 bit)	00 00 00 00 00 00	<unknown>
MAC	SMAC Address (48 bit)	04 F4 BC 23 5A 20	Enterprise/0/0
HEX	EtherType (16 bit)	08 00	IP
IPv4 - Internet Protocol v4 (20 bytes)			
...			
0000	00 00 00 00 00 00 04 F4 BC 23 5A 20 08 00	45 00??#Z ..E.
0010	03 05 00 00 00 00 7F FF 0F E4 0A 0A 0A 01 0A 0A	??.?.....
0020	0A 02		..

Here is an example of a captured FCS errored packet:

```
▼ Ethernet II, Src: Infinite_bc:23:5a (00:04:f4:bc:23:5a), Dst: d5:00:b8:00:00:00 (d5:00:b8:00:00:00)
  > Destination: d5:00:b8:00:00:00 (d5:00:b8:00:00:00)
  > Source: Infinite_bc:23:5a (00:04:f4:bc:23:5a)
    Type: Unknown (0x2008)
  > Data (453 bytes)
```

Notice the DMAC is incorrect and the SMAC has an added 00 before the 04.