



Support material  
FAQ

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## Revision History

Revision	Date	Comment
0.1	2008/05/20	Initial version

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## 1 Introduction

This material collect the questions customer ask frequently.

## 2 FAQ

### 2.1 *Chip Set*

### 2.2 *Board design*

### 2.3 *Software design*

### 2.4 *Engineer verification*

#### 2.4.1 **Big packet but slow throughput**

Question:

? Could you help to check why the "Passed Rate %" in the big frame size is worse than the small frame size?? It's strange for us.

Frame Size	Passed Rate(%)	(01,08,01) to (01,07,01) (pkts/sec)	Total
100M -100M			
64	100.00	148810	148810
128	95.79	80906	80906
256	90.79	41118	41118
512	88.23	20730	20730
1024	86.90	10404	10404
1280	86.65	8331	8331
1518	86.48	7028	7028

Answer:

Passed rate is not throughput, it is utilization.

I guess the current data rate is about 85~Mbps.

frame size: 64

throughput from packet generator =  $(64/(20[8 \text{ byte preamble}+96\text{bit intergap}]+64))*100M=76.19M$

Current vdsl data rate is bigger than it. so all of packet pass.  
this case have no flow control enable

frame size: 128

throughput from packet generator =  $(128/(20[8 \text{ byte preamble}+96\text{bit intergap}]+128))*100M=86.4M$

current vdsl data rate is less than it, so flow control enable and  
current throughput=80906\*128\*8=82.8M

frame size: 1514

throughput from packet generator =  $(1514/(20[8 \text{ byte preamble}+96\text{bit intergap}]+1514))*100M=98.69M$

current throughput=7028\*1514\*8=85.12M  
this case have flow control enable

same question:

? Packet size 512-1518時throughput正常，和web上讀到的rate吻合，但64-512時，  
throughput明顯的大於web上的rate。而且，packet越大，throughput應該越大才對。

## 2.5 Production verification