

Metanoia in 3 minutes

METANOIA



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Products

• Chipsets

- Falcon
- Merlin

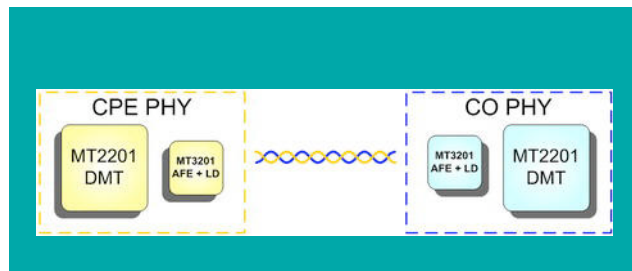
• Module

- Aero
- Award
- Hope

Falcon

Metanoia Communication offers state-of-the-art communication IC's for VDSL2. The product family includes complete chip-set solutions for both Central Office (CO) and Customer Premises Equipment (CPE).

FALCON, Metanoia's first family of end-to-end VDSL/ VDSL2 (12a) solutions, is compliant with the ITU-T VDSL2 standard (G.993.2). It consists of a single-channel DMT with 8a, 12a, and 17a profile and a 12 MHz bandwidth AFE with built in LD. Leveraging the maximum bandwidth of up to 12 MHz, FALCON drives 100Mb/60Mb over copper wires within 1000ft. Metanoia's FALCON offers a high performance VDSL2 solution with minimum extra devices and very competitive price for system design.



Product Brief : [Please contact us](#)



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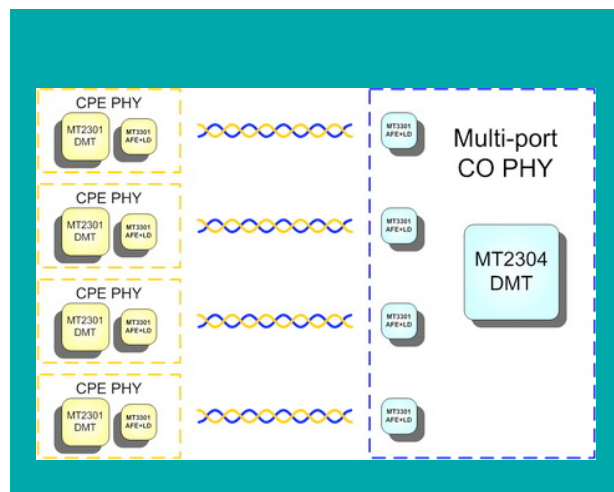
- Aero
- Award
- Hope

Merlin

Metanoia Communication offers state-of-the-art communication IC's for VDSL2. The product family includes complete chip-set solutions for both Central Office (CO) and Customer Premises Equipment (CPE).

MERLIN, Metanoia's newest family of end-to-end VDSL2(DMT) solutions, is compliant with the ITU-T VDSL2 standard (G.993.2). It consists of a four-channel CO solution for central office deployment and a single-channel chipset for CPE applications.

MERLIN provides flexible bandplans as well as service settings to allow a single hardware platform to serve global deployment. Metanoia's MERLIN offers a high performance VDSL2 solution with minimum extra devices and very competitive price for system design.

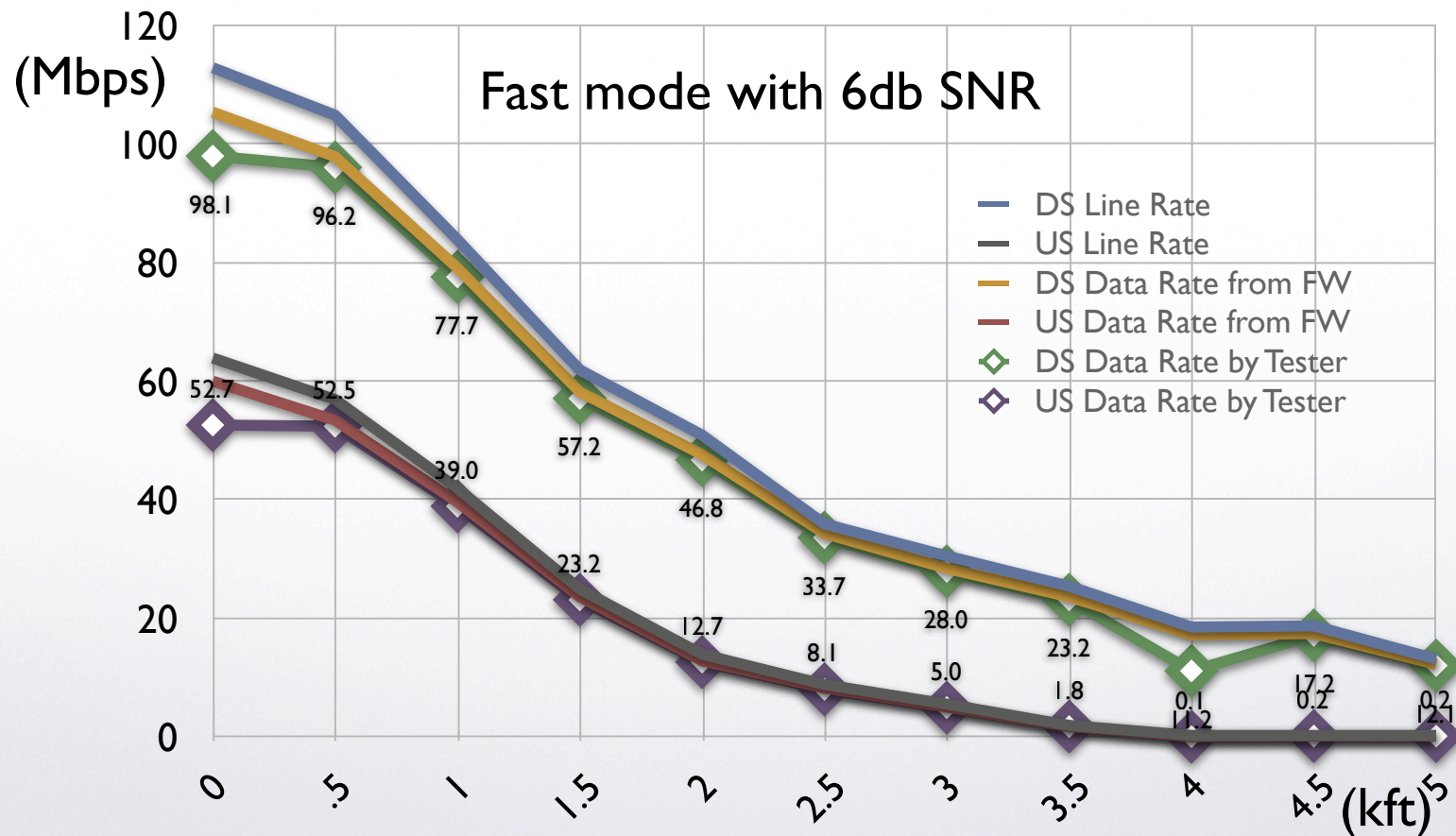


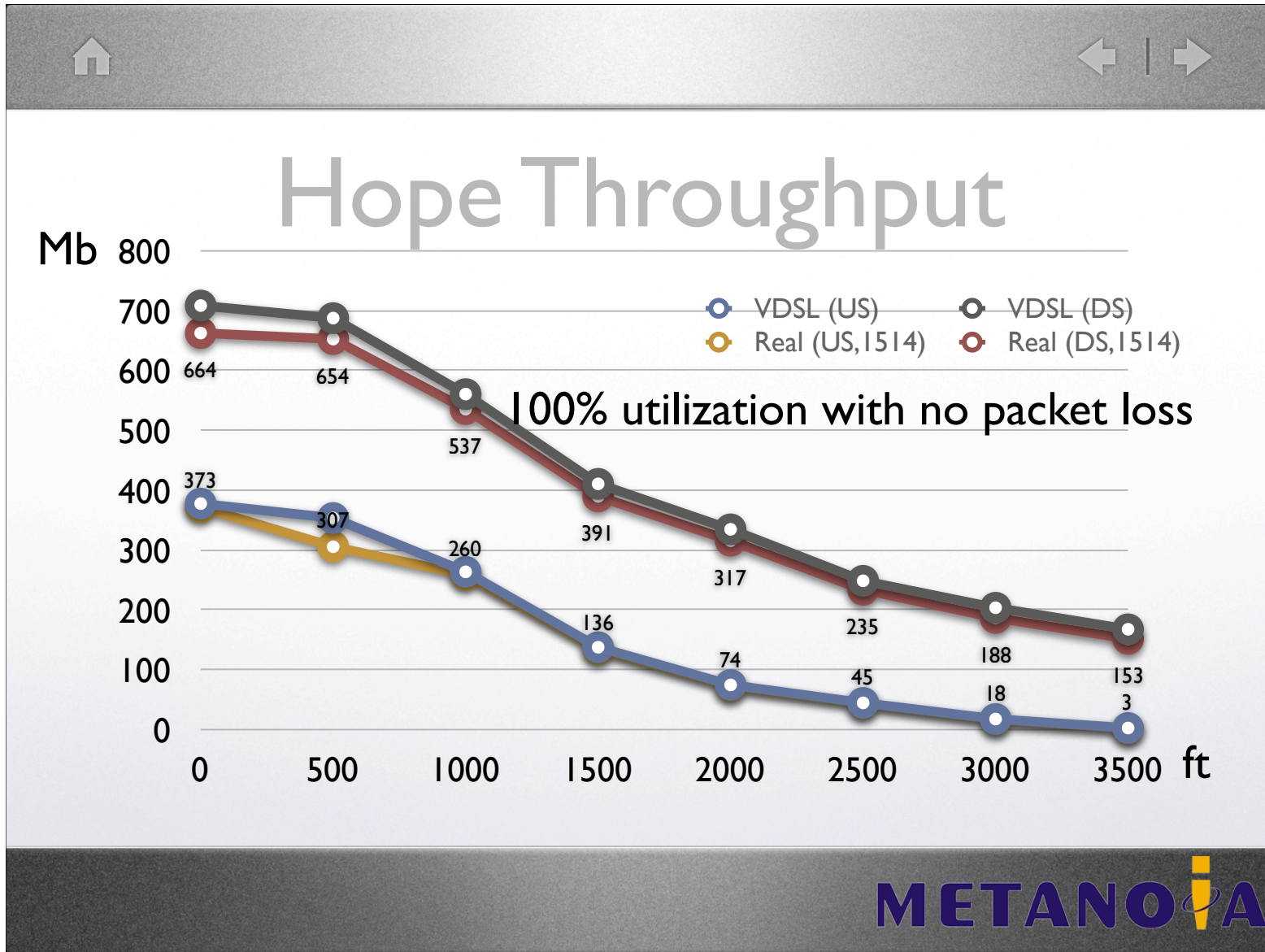
Product Brief : Please contact us

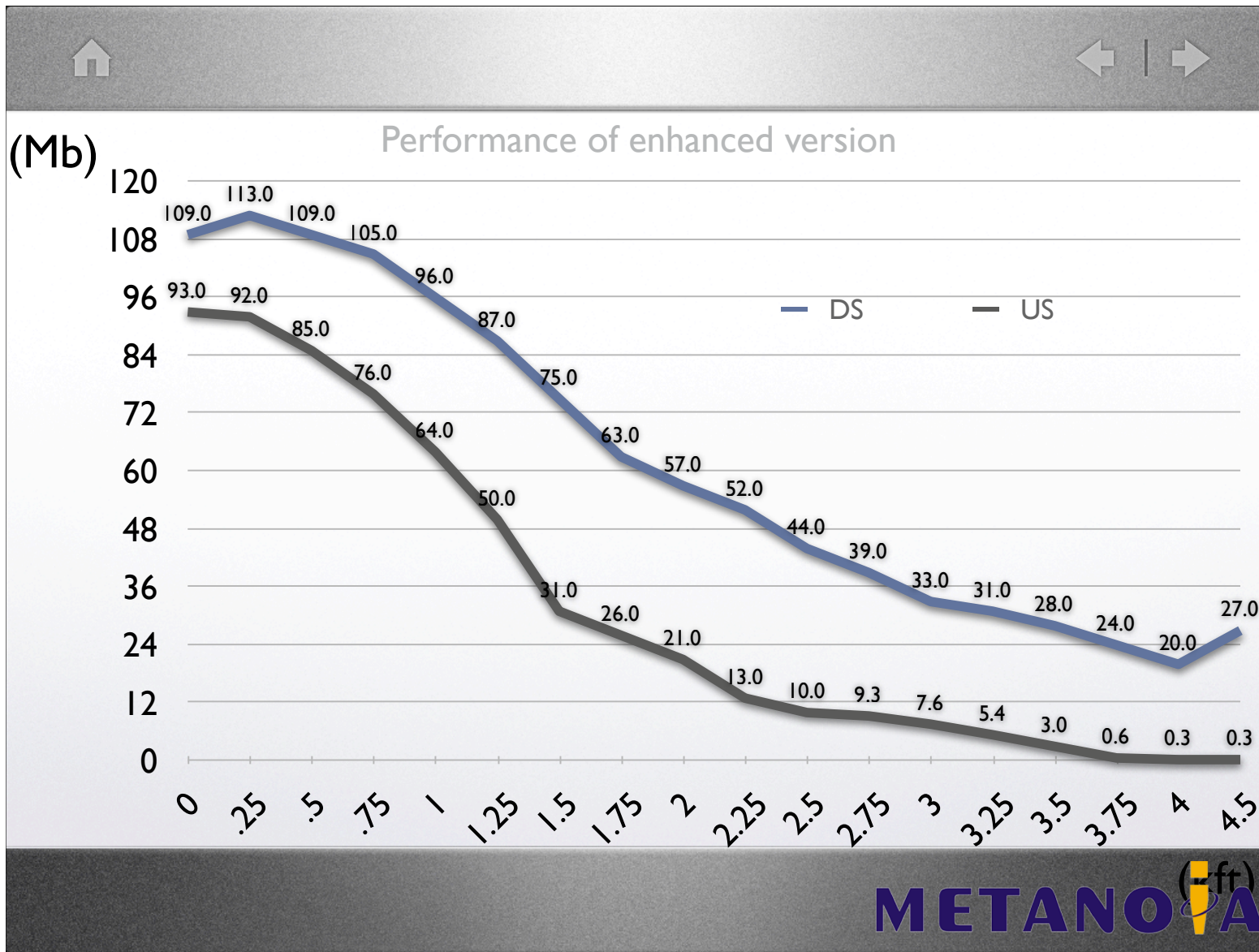
Modules	Name	Description
	Aero	Hardware based single port VDSL
	Award	Management 1 port VDSL and 4 port ethernet
	Hope	Management 8 port VDSL and 1 port Gb ethernet



Throughput







UTSTARCOM

Test Result

测试总结.

本次测试主要针对被测设备Metanoia - VDSL Award CO/Aero CPE 在单独和级联应用下的网络参数结合稳定性及部分QoS功能进行测试.测试的详细结果见下面附件.

从测试结果及问题列表可以看出,该产品在长期恶劣环境下的稳定性测试中表现比较理想,在流控开启情况下,除全速小包长外,短时间内,能做到无丢包,QoS功能在layer1/2/3/4可以发挥作用,在特定环境下,经过适当的配置,可同时开展IPTV高清业务和其他数据业务,但是对于产品的一些细节应用方面,例如网页上端口的管理和QoS的设定选项等相关功能方面还需要加强

Matrix Setup_Port A

No.	Select	Preamble (byte)	Packet Length	Pattern (byte)	Frame Gap (bit)	Append CRC
1	☒	8	1514	00 00 00 00 20	96	☒
2	☐					
3	☐					
4	☐					
5	☐					
6	☐					
7	☐					
8	☐					
9	☐					
10	☐					

Matrix Setup_Port B

No.	Select	Preamble (byte)	Packet Length	Pattern (byte)	Frame Gap (bit)	Append CRC
1	☒	8	1514	00 00 00 00 20	96	☒
2	☐					
3	☐					
4	☐					
5	☐					
6	☐					
7	☐					
8	☐					
9	☐					
10	☐					

Counter Window

Port #	Port A	Port B	Total: 2 ports
Link Status	Link Up	Link Up	N/A
Full/Half	Full	Full	N/A
Speed	100	100	N/A
Receive Packet Rate	4.477	7.746	N/A
Receive Byte Rate	6,796,086	11,759,941	N/A
Receive Utilization	55.09	95.32	N/A
Transmit Packet Rate	7.749	4.475	N/A
Transmit Byte Rate	11,762,982	6,794,565	N/A
Transmit Utilization	95.34	55.07	N/A
Filter 1 Packet Rate	0	0	N/A
Filter 1 Byte Rate	0	0	N/A
Filter 2 Packet Rate	0	0	N/A
Filter 2 Byte Rate	0	0	N/A
Receive Packet	1,008,061,514	1,744,624,930	2,752,686,444
Receive Byte	1,530,237,378,25	2,648,340,643,74	4,178,578,021,99
Transmit Packet	1,744,628,828	1,008,059,297	2,752,688,125
Transmit Byte	2,648,346,560,90	1,530,234,012,84	4,178,580,573,75
Filter 1 Packet	0	0	0
Filter 1 Byte	0	0	0
Filter 2 Packet	0	0	0
Filter 2 Byte	0	0	0
Capture	0	0	0

Mode: PG mode NuDOG Ethernet Adapter

NuDOG Window - C:\Program Files\Xtrans\NuDOG\NuDOG Window\Workspace\user.cfg

File Edit View Capture Statistics PG Tools Help

Matrix Setup_Port A

No.	Select	Preamble (byte)	Packet Length	Pattern (byte)	Frame Gap (bit)	Append CRC
1	☒	8	1514	00 00 00 00 20	96	☒
2	☐	8	1514	00 00 00 00 20	96	☒
3	☐	8	1514	00 00 00 00 20	96	☒
4	☐	8	60	FF FF FF FF FF	96	☒
5	☐	8	60	FF FF FF		☒
6	☐	8	60	FF FF FF		☒
7	☐	8	60	FF FF FF		☒
8	☐	8	60	FF FF FF		☒
9	☐	8	60	FF FF FF		☒
10	☐	8	1514	00 00 00		☒

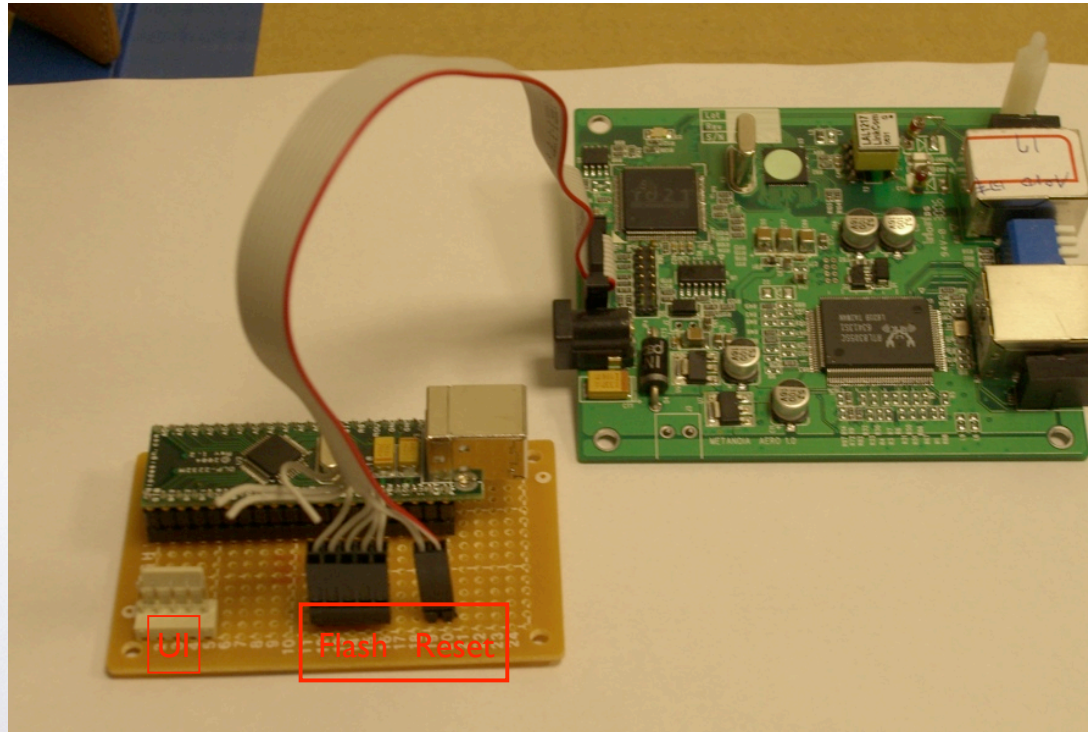
Counter Window

Port #	Port A	Port B	Total: 2 ports
Link Status	Link Up	Link Up	N/A
Full/Half	Full	Full	N/A
Speed	100	100	N/A
Receive Packet Rate	0	0	N/A
Receive Byte Rate	0	0	N/A
Receive Utilization	0.00	0.00	N/A
Transmit Packet Rate	0	0	N/A
Transmit Byte Rate	0	0	N/A
Transmit Utilization	0.00	0.00	N/A
Filter 1 Packet Rate	0	0	N/A
Filter 1 Byte Rate	0	0	N/A
Filter 2 Packet Rate	0	0	N/A
Filter 2 Byte Rate	0	0	N/A
Receive Packet	1,008,155,355	1,744,796,223	2,752,951,578
Receive Byte	1,530,379,828,89	2,648,600,666,51	4,178,980,495,40
Transmit Packet	1,744,796,223	1,008,155,355	2,752,951,578
Transmit Byte	2,648,600,666,51	1,530,379,828,89	4,178,980,495,40
Filter 1 Packet	0	0	0
Filter 1 Byte	0	0	0
Filter 2 Packet	0	0	0
Filter 2 Byte	0	0	0
Capture	0	0	0

Mode: PG mode NuDOG Ethernet Adapter



Hardware Connection



Firmware Manager

Metanoia Firmware Manager (Ver: 1.10)

Init Flash Parse

Filename: C:\prg\board\wire2\UI\v3.b

Global Configuration

G1	1	G7	7	G13	13
G2	2	G8	8	G14	14
G3	3	G9	9	G15	15
G4	4	G10	10	G16	16
G5	5	G11	11		
G6	6	G12	12		

reader

Sys Version: 3 FW DIP: 1

FW Group: 1

FW Version: 111111

FW Date: 122222 FW Time: 133333

MIB Configuration

Option	Save MIB Conf	1-AllGroupDef	Update Setting	Load from Flash	
DownTargetSnrtMgn	0	CfgUsPb2FirstTone	0	Preserve	0
UpTargetSnrtMgn	0	CfgUsPb2LastTone	0	Preserve	0
DownMaxInterDelay	0	CfgUsPb3FirstTone	0	Preserve	0
UpMaxInterDelay	0	CfgUsPb3LastTone	0	Preserve	0
BandPlan	0	CfgUsPb4FirstTone	0	Preserve	0
DownTargetSlowBurst	0	CfgUsPb4LastTone	0	Preserve	0
UpTargetSlowBurst	0	CfgDsPb0FirstTone	0	Preserve	0
DownSlowMaxDataRate	0	CfgDsPb0LastTone	0	Preserve	0
UpSlowMaxDataRate	0	CfgDsPb1FirstTone	0	Preserve	0
CfgUsPbs	0	CfgDsPb1LastTone	0	Preserve	0
CfgDsPbs	0	CfgDsPb2FirstTone	0	Preserve	0
CfgUsPb0FirstTone	0	CfgDsPb2LastTone	0	Preserve	0
CfgUsPb0LastTone	0	CfgDsPb3FirstTone	0	Preserve	0
CfgUsPb1FirstTone	0	CfgDsPb3LastTone	0	Preserve	0
CfgUsPb1LastTone	0	CfgDsPb4FirstTone	0	Preserve	0
	0	CfgDsPb4LastTone	0	Preserve	0

Development

Firmware Version: BootCode: C:\prg\board\wire2\UI\bootcode_v3.b 0

Filename: C:\prg\board\wire2\UI\v3.b FW: Z:\8400\logistic\firmware\073107_182732\ aero_ot

Address: 0 Ignore first byte

WriteByPar Calculate Address Pack 1-OneFW Update FW

Cfg Addr: 10200 Cfg Size: 40 Cfg Dest Addr: 7fc0

FW Start: 20000

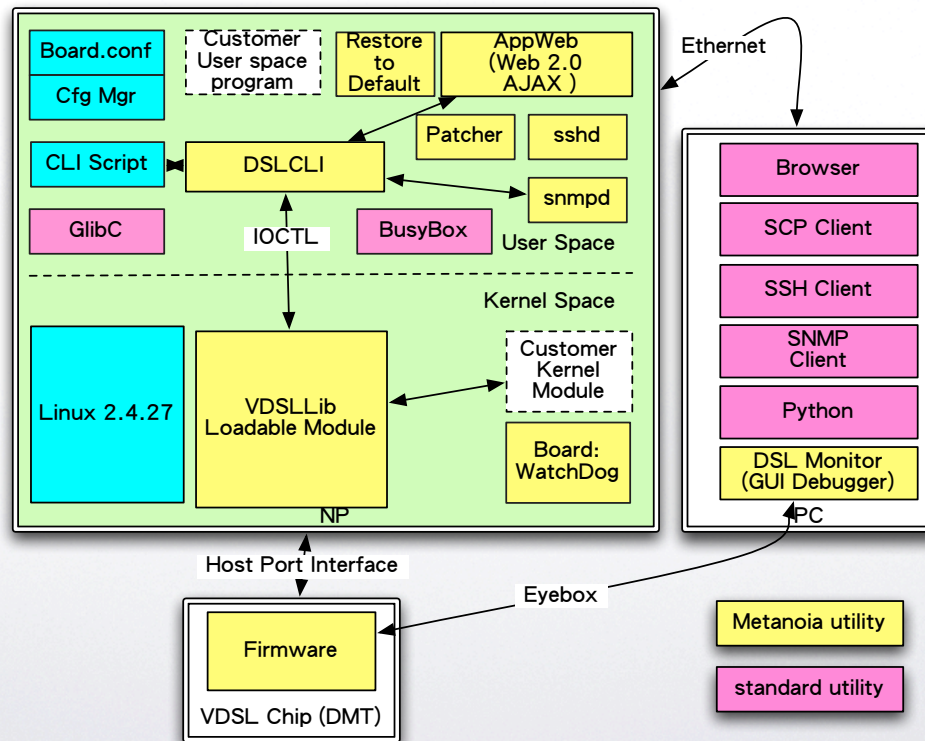
Serial Number: MT060904001

Generate Serial Flash Serial

Software features

- Flexible VDSL configuration
- Command Line Interface (CLI)
- Web 2.0 interface
- Remote management through ssh
- File upgrade through scp
- Firmware upgrade through web
- SNMP supported
- Easy for customization
- Layer 1,2,3,4 QOS with bandwidth control supported
- Port isolation by VLAN

Award





Features Scope

	Aero	Award-Lite	Award	Hope
Firmware Update	Firmware Mgr	Rs232	scp	The same with Award
Firmware Configuration	Firmware Mgr	CLI API	API CLI Web	
Current Status	DslMonitor	CLI DslMonitor	Web Snmp DslMonitor	
Remote Mgr	X	X	SSH Python	
PlugIn	X	X	Control Module ...	X



Web Interface

CLI command

- ▶ System Admin
 - Lan Setting
 - Password Setting
- ▶ VDSL setting
 - Mib Monitor
 - Port status
 - Port setting
- ▶ L2 setting
 - L2 General setting
 - QoS setting
 - VLAN setting
 - Bandwidth control



QoS

QoS

	Port 1	Port 2	Port 3	Port 4
Priority	Port based ▼	VLAN based ▼	Service based ▼	TCP/UDP based ▼

Weighted round robin ratio setting of priority queue

	Queue 1	Queue 2	Queue 3	Queue 4
Weight	1	2 ▼	4 ▼	8 ▼