Setting up the TB5800 for an electrical L2 loopback (MAC swap)



1. Select test - ETHERNET/10/100/1000 -Layer 2 traffic – P1/P2 terminate

2. Select SETUP, go to the INTERFACE/PHYSICAL LAYER tab. Set auto-negotiation ON/OFF as per the circuit configuration. This procedure will cover autoneg off and speed set to 100M.
1000mbs electrical is only possible with autoneg turned on

System 🛄 Tests]			ľ	x 🛜 🌒 🐊	11:09 PM 01/06/2011
Select View Reports	Tools Help	0	Port	1: 10/100/1000 Eth Layer 2	Traffic Term	
Interface Ethernet OA	M Traffic C	apture Filte	ers Timed Test			Results
Physical Layer 🛓 Network	Visibility GPS	/CDMA Recei	iver			
Auto Negotiation						
Auto Negotiation	Off	\$				\equiv
Duplex	Full	¢ S	Speed (Mbps)	100	\$	_
Flow Control						
Flow Control	On	+				
Pause Length (Quanta)	10	P	Pause Length (Time	e-ms) 0.0512		
Synchronous Ethernet						=
Enable Synchronous	Ethernet					
Polarity Correction Enable Polarity Corre	ction					
	cuon					

3. Go to the Filters tab and tap on CLEAR ALL FILTERS.

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	Select Test	View	Repo	orts T	Fools H	elp 🔞	ert.	Por	rt 1: 10/100/1000 Eth Laye	er 2 Traffic Term	
	Test Interface Filters Summary Ethernet Byte Path Rx Payload TPID	Ethe	Rx Pi Rx Pi Pay Rx	OAM Setting o filters ayload yload A BERT	Traffic gs s are set. Settlings vnalysis: Pattern:	Capture (Filters are On 2^23 - 1	Filters optional. Cle	Timed Test			

4. Your tester now might need your source MAC address. To get that press the ETHERNET tab. At the bottom of this screen, in the graphic of the ethernet frame, select SA (source address). The source MAC type should be factory default. The default MAC is there.

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Select Test View Reports	Tools Help 🔞	▶ Port 1: 10/1	100/1000 Eth Layer 2 Traffic Term	
Interface Ethernet OA	M Traffic Capture Fil	ters Timed Test		Results
Encapsulation	None 😫	Test Mode	Traffic 🗘	
Frame Type	DIX 🗘			
Frame Size (Bytes)	\$12			
DA	SA Ty	pe C	Data FCS	
Source MAC Type	Factory Default 😫			
Default MAC	00-80-16-8A-53-9B			-
Auto-increment MAC	No	# MACs in Sequence	2	

- 5. Now press RESULTS and if your autoneg setting is correct, and you are connected to the circuit you should have SYNC & LINK LED's.
- 6. At the bottom of the screen press LLB (line loopback). This will put the unit into loopback and will transmit out any traffic it receives and do a MAC swap in the process.

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Select Test Port 1: 10/100/1000 Eth	eports Tools Help 🔞 n Layer 2 Traffic Term		Port 1: 10/100/1000	Eth Layer 2 Traffic Term			
	5. 			Running	4S Setup		
Ethernet Paylo	ad LBM/LTM J-Co	nnect					
Off Auto Neg. Test	◆ 512 ◆ Mode Frame Size				Restart		
Summary	Summary 🗘 Status	s 🗘	Ethernet	↓ L2 Link Stats	•		
Sync Acquired	Acterna Test Packet Detect	OFF T	otal Util % 🖃		Stop Test		
Clink Active			Average	Unavailable			
ATP Detect			Current	Unavailable			
Pattern Sync			Minimum	Unavailable			
VLAN Frame Detect			Peak	Unavailable	SAM- Complet		
SVLAN Frame Detect		C	urrent Util % 🖃				
History			Unicast	Unavailable	-41		
Time Source			Multicast	Unavailable	∠ .		
ToD Sync		D	Dividucidast	UnitavaliaDie	Enhance RFC 254		
History		ĸ	Current	III) 🗖 Unavailable			
			Minimum	Unavailable	-6		
			**	Una			
			🔶 🗌 🖻	Mbps 🗧	QuickChe Toolkit		
Actions Service Disruption Errors OAM Capture							
Start Traffic Up	Loop Down	Pause Frame Insert					

*** Note on auto-negotiation*** If your circuit requires that autoneg be turned on (step #2) you need to verify that the link comes up correctly. To do this go to RESULTS and select ETHERNET/Autoneg Status. You want to ensure that the link came up correctly in full duplex at the specified speed. See below

System Tests	8:30 PI					
Select View Reports Tools Help 🔞 Port 1: 10/100/1000 Eth Layer 2 Traffic Term	Port 1: 10/100/1000 Eth Layer 2 Traffic Term Running 1m:24s					
Ethernet Payload LBM/LTM J-Connect On \$ Traffic \$ \$ Auto Neg. Test Mode Frame Size	Restart					
Summary Ethernet Sync Acquired Link Active Frame Detect Pattern Sync VLAN Frame Detect Stacked VLAN Detect History Time Source ToD Sync History	Ethernet AutoNeg Status Link Advt. Status Done Link Advt. Status Done Link Config ACK Yes Speed (Mbps) 100 Duplex Full 10Base-TX FDX Yes 100Base-TX FDX Yes 100Base-TX FDX Yes 100Base-TX FDX Yes 1000Base-TX FDX No 1000Base-TX FDX No 1000Base-TX FDX No Pause Capable Rx Only Remote Fault No					
Actions Service Disruption Errors OAM Capture Start Loop Loop LLB Pause Frame Traffic Up Down LLB Insert						