IEEE 802.3ae Plenary – July 9th – 13th

XAUI Interoperability

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Participants

Blaze Networks

Velio

Mindspeed

Tyco Electronics

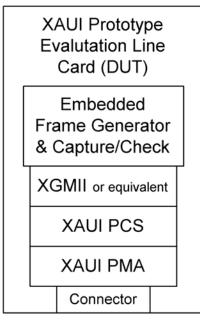
Texas Instruments

- Interoperability Testing Sponsor 10GEA
- Interoperability Test Host and Supervision UNH IOL



10GEA XAUI Interoperability Test Proposal

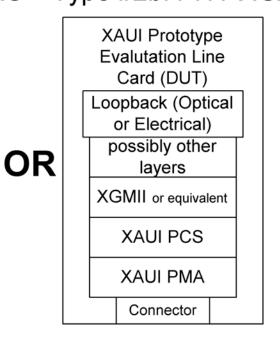
Type #1 Type #2a: *DTE XGXS* Type #2b: *PHY XGXS*

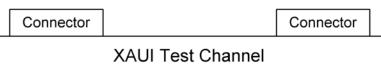


XAUI Prototype
Evalutation Line
Card (DUT)

XGMII or equivalent
RX to TX
Loopback

XGMII or equivalent
XAUI PCS
XAUI PMA
Connector





Of the two line cards connected to the test channel - at least one must be type #1



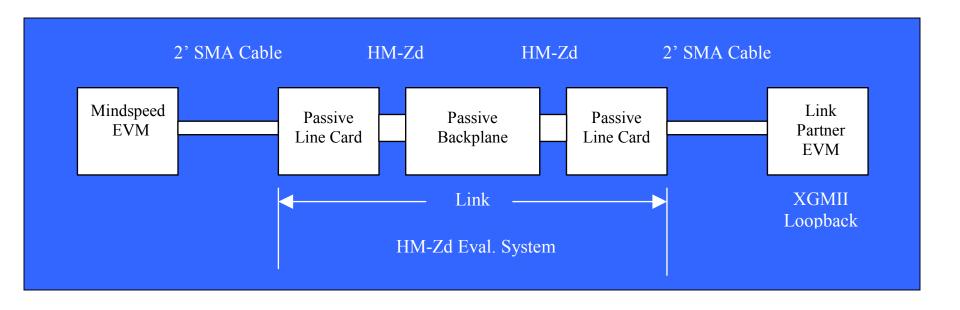
Issues for July Testing

- Embedded frame generator / check in development
- Test cards for common platform in development
- Vendor EVM's cabled to Tyco Electronics HM-Zd Evaluation System
- Different device on-board pattern generators
 - -8B/10B
 - 256 bytes of commas followed by 256 byte decrementing pattern FF-00
 - 2^7 PRBS
 - 2^10 PRBS
- All devices had same patterns on all 4 lanes
- Testing for high level of confidence 10^-12 BER
- No compliance testing performed



Test 1 – Mindspeed Driving 8B / 10B Data

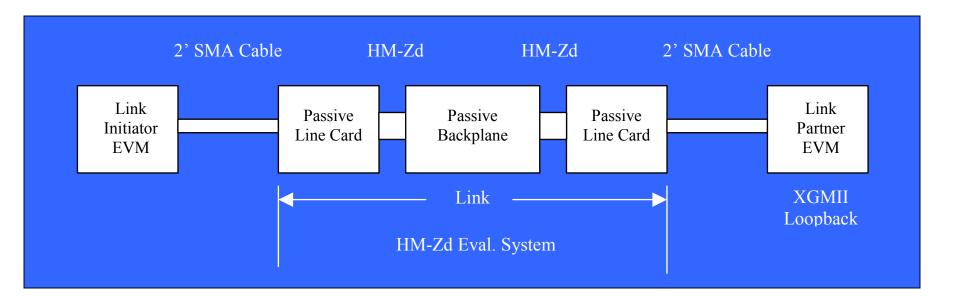
Link	EVM	Link	Line Card	Backplane	Total Trace	Total Cable	# of Errors
Partner	Length	Length	Length	Length	Length	Length	
TI	2.5" (min)	10"	3"	4"	15"	4'	0
		22"	3"	16"	27"	4'	0
Velio	2.5" (min)	10"	3"	4"	15"	4'	0
		22"	3"	16"	27"	4'	0





Test 2 – PRBS Data

Link	Link	Data	EVM	Link	Line Card	Backplane	Total Trace	Total Cable	# of Errors
Initiator	Partner	Pattern	Length	Length	Length	Length	Length	Length	
TI	Velio	2^7	2.5" (min)	10"	3"	4"	15"	4'	0
			-	22"	3"	16"	27"	4'	0
Velio	TI	2^10	2.5" (min)	10"	3"	4"	15"	4'	0
			-	22"	3"	16"	27"	4'	0





Test 3 – Blaze Networks

Link	Data	EVM	Link	Line Card	Backplane	Total Trace	Total Cable	# of Errors
Initiator	Pattern	Length	Length	Length	Length	Length	Length	
TI	2^7	2.5" (min)	10"	3"	4"	20"	6'	0
Velio	2^10	2.5" (min)	10"	3"	4"	20"	6'	0
Mindspeed	8B/10B	2.5" (min)	10"	3"	4"	20"	6'	0

