

## Test Report for 100Base-TX

Time: 20:21:01

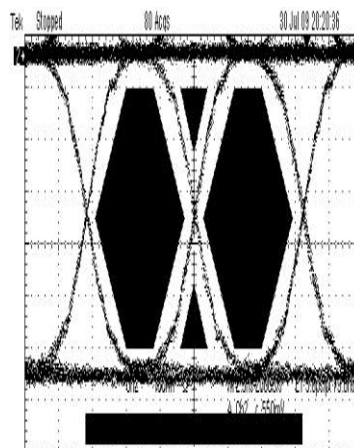
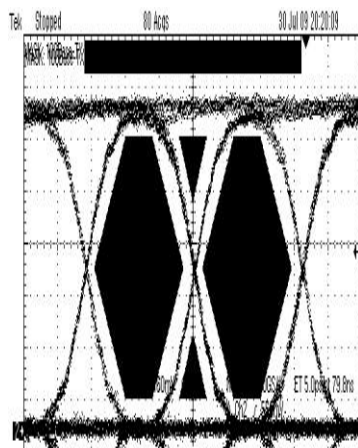
Device ID : AX88796B

Device Description : L&F AX88796B ISA module board

Port ID :

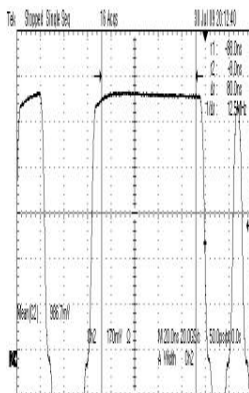
| Test                    | Spec. Range           | Measured Value | Result        |
|-------------------------|-----------------------|----------------|---------------|
| AOI Template            | Fit the template      |                | Pass          |
| Output Voltage (+Vout)  | 950mV to 1050mV       | 989.4mV        | Pass          |
| Output Voltage (-Vout)  | -950mV to -1050mV     | -991.1mV       | Pass          |
| Amplitude Symmetry      | 0.98 to 1.02          | 0.998          | Pass          |
| Rise Time(+ve)          | 3ns to 5ns            | 3.8ns          | Pass          |
| Rise Time(-ve)          | 3ns to 5ns            | 3.94ns         | Pass          |
| Fall Time(+ve)          | 3ns to 5ns            | 3.46ns         | Pass          |
| Fall Time(-ve)          | 3ns to 5ns            | 3.65ns         | Pass          |
| Rise/Fall Symmetry(+ve) | <500ps                | 339ps          | Pass          |
| Rise/Fall Symmetry(-ve) | <500ps                | 291ps          | Pass          |
| Overshoot(+ve)          | <5%                   | 0.00%          | Pass          |
| Overshoot(-ve)          | <5%                   | 0.00%          | Pass          |
| Transmit Jitter(+ve)    | <1.4ns                | 600ps          | Pass          |
| Transmit Jitter(-ve)    | <1.4ns                | 560ps          | Pass          |
| Distortion (Duty Cycle) | <500ps( $\pm 250$ ps) | 217ps          | Pass          |
| Transmitter Return Loss |                       |                | Not Available |
| Receiver Return Loss    |                       |                | Not Available |

## ANSI X3.263-1995: Annex J AOI Template



AOI Template Result :  
Pass

## ANSI X3.263-1995 : 9.1.2.2 Differential Output Voltage

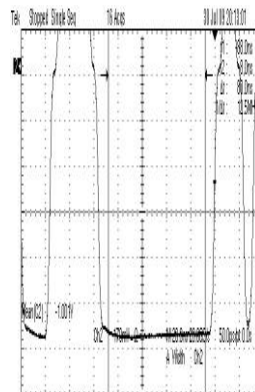
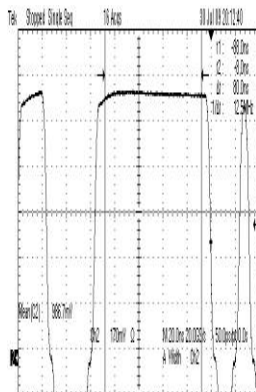


|  |   |
|--|---|
| Positive Amplitude(+Vout) : 989.4mV<br>Baseline(+ve) : Not Available | Negative Amplitude(-Vout) : -991.1mV<br>Baseline(-ve) : Not Available |
| <b>Spec Range : 950mV to 1050mV</b>                                  | <b>Spec Range : -950mV to -1050mV</b>                                 |
| Output Voltage(+Vout) Result : Pass                                  | Output Voltage(-Vout) Result : Pass                                   |

Differential Output Voltage Result : Pass

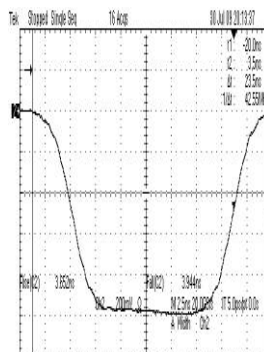
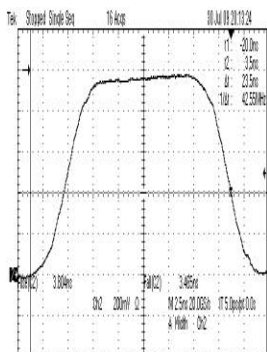
NOTE: Amplitude values are corrected for Baseline voltage

## ANSI X3.263-1995: 9.1.4 Signal Amplitude Symmetry



|                                  |
|----------------------------------|
| Amplitude Symmetry : 0.998       |
| Spec Range: 0.98 to 1.02         |
| Amplitude Symmetry Result : Pass |

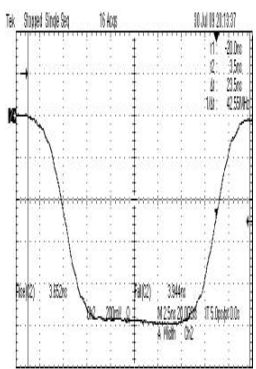
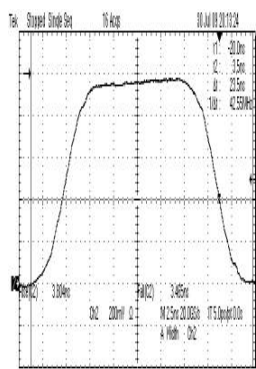
## ANSI X3.263-1995: 9.1.6 Rise Time



|                              |                              |
|------------------------------|------------------------------|
| Rise Time(+ve) : 3.8ns       | Rise Time(-ve) : 3.94ns      |
| Spec Range: 3ns to 5ns       | Spec Range: 3ns to 5ns       |
| Rise Time(+ve) Result : Pass | Rise Time(-ve) Result : Pass |

Rise Time Test Result : Pass

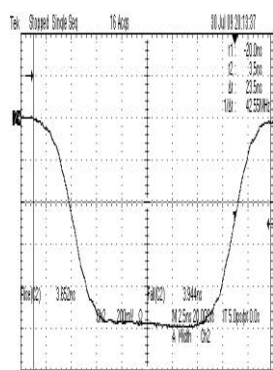
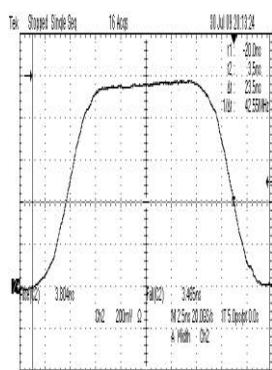
ANSI X3.263-1995: 9.1.6 Fall Time



|                              |                              |
|------------------------------|------------------------------|
| Fall Time(+ve) : 3.46ns      | Fall Time(-ve) : 3.65ns      |
| Spec Range: 3ns to 5ns       | Spec Range: 3ns to 5ns       |
| Fall Time(+ve) Result : Pass | Fall Time(-ve) Result : Pass |

Fall Time Test Result : Pass

ANSI X3.263-1995: 9.1.6 Rise Fall Symmetry

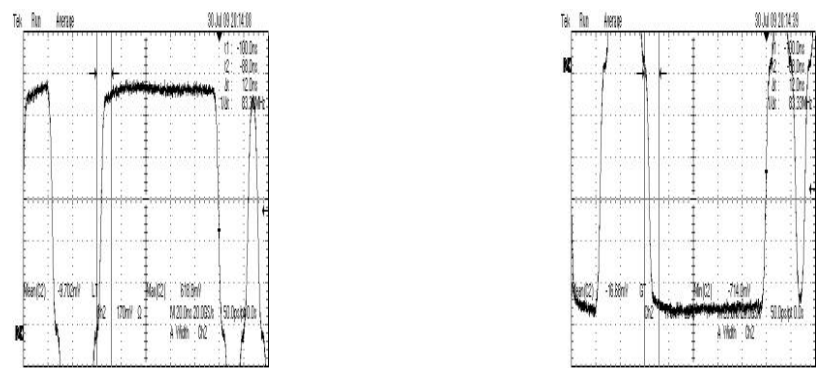


|                                       |                                       |
|---------------------------------------|---------------------------------------|
| Rise/Fall Symmetry(+ve) : 339ps       | Rise/Fall Symmetry(-ve) : 291ps       |
| Spec Range: <500ps                    | Spec Range: <500ps                    |
| Rise/Fall Symmetry(+ve) Result : Pass | Rise/Fall Symmetry(-ve) Result : Pass |

Rise/Fall Symmetry(Max-Min) : 479ps

Rise/Fall Symmetry Result : Pass

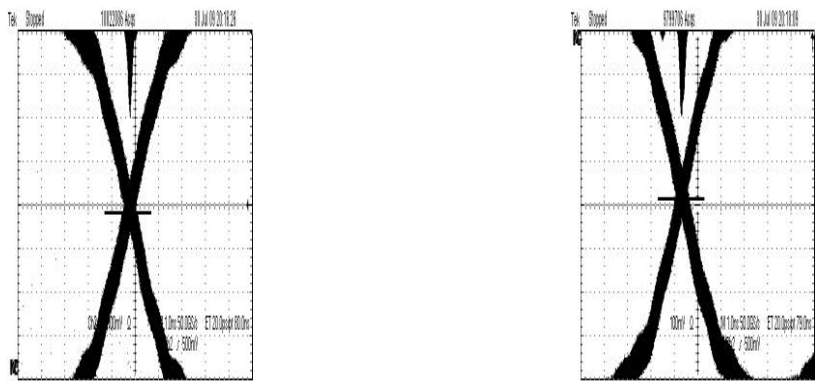
ANSI X3.263-1995: 9.1.3 Waveform Overshoot



|                              |                              |
|------------------------------|------------------------------|
| Overshoot(+ve) : 0.00%       | Overshoot(-ve) : 0.00%       |
| Spec Range: <5%              | Spec Range: <5%              |
| Overshoot(+ve) Result : Pass | Overshoot(-ve) Result : Pass |

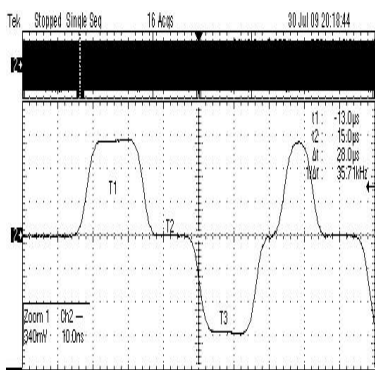
Waveform Overshoot Test Results : Pass

ANSI X3.263-1995: 9.1.9 Transmit Jitter



|                                    |                                    |
|------------------------------------|------------------------------------|
| Transmit Jitter(+ve) : 600ps       | Transmit Jitter(-ve) : 560ps       |
| Spec Range: <1.4ns                 | Spec Range: <1.4ns                 |
| Transmit Jitter(+ve) Result : Pass | Transmit Jitter(-ve) Result : Pass |

ANSI X3.263-1995: 9.1.8 Distortion(Duty Cycle)



|   |
|---|
| Distortion(Duty Cycle) : 217ps  |
| Spec Range: <500ps(+/-250ps)  |
| Distortion(Duty Cycle) Result :<br>Pass<br>T1 = 100ps<br>T2 = 167ps<br>T3 = 217ps |

## ANSI X3.263-1995: 9.1.5 Transmitter Return Loss

Not Available

| Frequency | Spec. Value | Measured Value | Result |
|-----------|-------------|----------------|--------|
|           |             | Not Available  |        |
| 1 MHz     | -16.00dB    | Not Available  |        |
| 10 MHz    | -16.00dB    | Not Available  |        |
| 20 MHz    | -16.00dB    | Not Available  |        |
| 30 MHz    | -16.00dB    | Not Available  |        |
| 40 MHz    | -13.50dB    | Not Available  |        |
| 50 MHz    | -11.56dB    | Not Available  |        |
| 60 MHz    | -9.97dB     | Not Available  |        |
| 70 MHz    | -10.00dB    | Not Available  |        |
| 80 MHz    | -10.00dB    | Not Available  |        |

Transmitter Return Loss Result : Not Available

## ANSI X3.263-1995: 9.1.5 Receiver Return Loss

Not Available

| Frequency | Spec. Value | Measured Value | Result |
|-----------|-------------|----------------|--------|
|           |             | Not Available  |        |
| 1 MHz     | -16.00dB    | Not Available  |        |
| 10 MHz    | -16.00dB    | Not Available  |        |
| 20 MHz    | -16.00dB    | Not Available  |        |
| 30 MHz    | -16.00dB    | Not Available  |        |
| 40 MHz    | -13.50dB    | Not Available  |        |
| 50 MHz    | -11.56dB    | Not Available  |        |
| 60 MHz    | -9.97dB     | Not Available  |        |
| 70 MHz    | -10.00dB    | Not Available  |        |
| 80 MHz    | -10.00dB    | Not Available  |        |

Receiver Return Loss Result : Not Available