



APPLICATION NOTE

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| Cage Code: 06324 | Document Description APPLICATION NOTE EL OCHITO WHITE S-PARAMETER MODELS | Document #: AN0026 Revision: D Page 1 of 6 |
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**APPLICATION NOTE
EL OCHITO WHITE S-PARAMETER MODELS**

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EL OCHITO WHITE S-PARAMETER MODELS**

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REVISION HISTORY

| REV | DATE | REVISED PAGES | AUTHOR | REVISIONS |
|-----|------------|---------------|--------------|--|
| A | 11/29/2023 | | L. Blackwell | Initial Release |
| B | 4/17/2024 | | L. Blackwell | Consolidated Sections 4.1 and 4.2 with updated parameter table |
| C | 5/22/2024 | | L. Blackwell | Updated touchtone links of table 2 |
| D | 2/13/2025 | | L. Blackwell | Updated pair length verbiage per DCN104355 |
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1.0 Purpose

This document describes the El Ochito White, board connector to board connector and cable to cable, electrical behavioral models.

2.0 Referenced Documents

| Document Number/Name | Description |
|----------------------|--|
| GT-23-169 | El Ochito White High Speed Test Report |
| 792-001 | Datalink Plug Connector Drawing, Socket Contacts, Series 792 |
| 792-002 | Datalink Receptacle Connector Drawing, Pin Contacts, Series 792 |
| 792-005 | Vertical PCB Mount Plug Connector Drawing, El Ochito Socket Contacts, Series 792 |
| 792-006 | Vertical PCB Mount Receptacle Connector Drawing, El Ochito Pin Contacts, Series 792 |
| 792-009 | Right Angle PCB Mount Plug Connector Drawing, El Ochito Socket Contacts, Series 792 |
| 792-010 | Right Angle PCB Mount Receptacle Connector Drawing, El Ochito Pin Contacts, Series 792 |

Table 1. Reference Documents

3.0 Responsibility

This document is the responsibility of the Glenair High-Speed Datalink Group.

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4.0 El Ochito White S-Parameters

4.1 Configurations

The S-parameter models were obtained through testing PCB mounted straight connectors (part numbers 792-006PA-1P1MNNA and 792-005SA-1P1MNNA) and PCB mounted right angle connectors (part numbers (792-010PA-1P1MENAA and 792-009SA-1P1MNNA). The test cable assemblies were also tested that consisted of a Series 792 plug connector, part number 792-001SA-1W1MN, with 858-045 contacts, and a Series 792 receptacle connector, part number 792-002PA-1W1MNN, with 858-046 contacts. The electrical effects of the test PCB and test cabling were de-embedded from the models. Refer to Glenair Test Report GT-23-169 for detailed testing information. The resulting models consist of S-parameters in Touchstone formatted files. The following table delineates the tested configurations and the resulting Touchstone files.

| Configuration | Touchstone File |
|---|---|
| Straight PCB to Straight PCB | El Ochito White ST to ST.s4p |
| Right-angle PCB to Right-angle PCB (short pair) | El Ochito White RA to RA (short pair).s4p |
| Right-angle PCB to Right-angle PCB (long pair) | El Ochito White RA to RA (long pair).s4p |
| Cable Assembly to Cable Assembly | El Ochito White CA to CA.s4p |
| Right-angle PCB to Straight PCB (short pair) | El Ochito White RA to ST (short pair).s4p |
| Right-angle PCB to Straight PCB (long pair) | El Ochito White RA to ST (long pair).s4p |
| Straight PCB to Cable Assembly | El Ochito White ST to CA.s4p |
| Right-angle PCB to Cable Assembly (short pair) | El Ochito White RA to CA (short pair).s4p |
| Right-angle PCB to Cable Assembly (long pair) | El Ochito White RA to CA (long pair).s4p |

Table 2. Test Configuration to Touchstone File Mapping

There are two files in the table above associated with each right-angle configuration. Due to the physical layout of the right-angle connector, pair positions 1/2 and 7/8 are longer than pair positions 3/4 and 5/6.

In addition to direct downloadable links from the table above, the files of Table 2 are supplied as attachments to this document.

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4.2 Port Assignments

The Touchstone files utilize the following port assignments:

