

**Minutes of the CE-2.0 National Connectors Standards Committee  
October 8, 2003  
San Antonio, TX**

**Members Present**

Bill Peverill	WPA
David Bouzek	Tri-Star Electronics
Michael Whitney	IBM

**Liaison Members Present**

Dennis Cross	DSCC
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**Others Present**

Harvey Waltersdorf	
Kirk Ulery	Delphi

**Members Absent**

Frank Ruffino  
Jeff Toran  
Greg Brown  
Al Davis  
Bill Upstone  
Max Peel

Meeting number 33 of the National Connectors Standards Committee convened on 8:00 on October 8, 2003.

**1. REVIEW AND APPROVAL OF MINUTES**

The minutes of Meeting No. 32 held in San Diego, CA were approved as published.

## 2. CHAIRMAN'S REPORT

- A. CE-3.0 is now CE-2.9, a subcommittee of CE-2.0.
- B. Continuing problem with members on sending ballots in on time. Members should copy the chairman on approvals so he can keep track of the approval status.
- C. Harvey went over EIA documents, about 6, which need five year review (see Attachment 1)

## 3. SUBCOMMITTEE MEETINGS

CE-2.2 Circular Connector Specifications-Chairman: Al Davis  
No report.

CE-2.3 Rectangular Connector Specifications-Chairman:  
No report.

CE-2.4 Printed Board Connector Specifications-Chairman: Rick Taylor, Vice Chairman:  
Carl Fritz.  
No report.

CE-2.5 Backplane Specifications-Chairman: TBD  
Subcommittee is still inactive, but will remain on the agenda.

CE-2.6 Contact Specifications-Chairman: Dave Bouzek  
Harvey Waltersdorf read a report from Max Peel on the Compliant Pin Document. David Bouzek said he had not seen the document. As a result, it was moved and approved to send the document out on a letter ballot. Max Peel will need to obtain a PINS number and send it to Cecelia.

Dave Bouzek reported that the High Strength Ni plated wire study is progressing with testing in progress. Results will be forwarded to SAE when the study is complete.

CE-2.7 Editing Subcommittee-Chairman: Carl Fritz  
No report

CE-2.8 International Standards Subcommittee: Chairman: Jeff Toran  
Harvey Waltersdorf read the following report from Jeff Toran: The IEC Connector meetings are the week of November 10-14. One work activity of interest to the CE-2.1 folks is that I am the project leader to revise the IEC test schedules to they are more like the EIA schedules.

CE-2.9 Sockets Subcommittee  
Minutes of last meeting in Tampa, FL were approved. See attachment #4 for report.

#### 4. WORKING GROUP MEETINGS

CE-2.0.1 Contact and Connector Plating-Chairman: Bill Upstone  
No report.

CE-2.0.3 Insulator Materials Frank  
No report

CE-2.0.4 Connector Outlines & Surface Mount Activities. Harvey has taken on coordination.

#### 5. SPECIAL TASK GROUP MEETINGS

STG-13-2.0 Terminology-Chairman: TBD Harvey will track down status of PN-5037.

STG-20-2.0 Space Requirements-Chairman: Charles Gamble Jr.  
No report.

STG-23-2.0 Current vs Temperature Rise-Chairman: Max Peel  
Bill to follow up with Max.

CE-2.1 Test Procedures-Chairman: Bill Peverill, Vice Chairman: Max Peel.  
The Test Procedures Subcommittee was convened by Bill Peverill (see Attachment No. 3 for meeting report). At the conclusion of the meeting the actions of the subcommittee were unanimously approved.

#### 6.0 LIASION REPORTS

A. DSCC (Including Army, Air Force, & Navy (except NAVAIR)  
Harvey read a report from Rick Taylor (see Attachment No.2)

B. NAVAIR LAKEHURST REPORT  
A report was received from Dwight Tabit on the status of the 1344 Harmonization project (see Minutes of CE-2.1 meeting, Attachment No 3)

C. SAE/ISO  
Dave Bouzek reported on SAE/ISO activities.

D. ASTM  
No report.

E. NASA  
No report

F. IICIT  
The 36<sup>th</sup> IICIT Symposium was held September 17-19 in Lake Buena Vista, FL.

#### 7.0 OLD BUSINESS

- Harvey Waltersdorf is working on the socket Generic Specification and will apply it to the connector generic

#### 8.0 NEW BUSINESS

- A. P-4 on connector outlines was meeting next door. Harvey will find what socket outlines are being worked on.
- B. CE-4.0, RF Products is looking for our assistance on RF TP's. Harvey will determine a point of contact in CE-4.0.
- C. Michael Whitney gave a presentation on "Implementing Business to Business Processes for Component Technical Data Exchange.

#### 9.0 FUTURE MEETINGS

Due to the attendance, Harvey Waltersdorf announced that future meetings will be held in conjunction with ECA Engineering Summits. Tentative date for the next meeting will be April 19-22 in Tampa, FL.

The meeting adjourned at 12:30 PM on October 8, 2003.

This meeting was conducted in accordance with EIA Legal Guidelines and EIA Manual for Organization and Procedure.

Wm. Peverill, Secretary  
EIA/ECA CE-2.0

Harvey Waltersdorf, Chairman  
EIA/ECA CE-2.0

## ATTACHMENT 1

Document	Title	Date Issue/Rev.	Comments	Comm.
EIA-7000000	Generic	August-96	Needs revision.	
EIA-700A000	Sectional, Printed Board Connectors		SP2940: Not published	CE-2.3
EIA-700A0AA	Detail, 1.27mm ribbon contact, trapezoidal, shielded I/O	April-96	Needs to be reviewed.	CE-2.3
EIA-700A0AB	Detail, 1.27mm 68-circuit memory card interconnect	December-95	Out on Ballot.	CE-2.9
EIA-700A0AC	Detail, 1mm, 88-circuit DRAM interconnect	August-96	Needs to be reviewed.	CE-2.9
EIA-700A0AD	Detail, 1.27mm ribbon contact, trapezoidal, self-locking I/O	November-97	Needs to be reviewed.	CE-2.3
EIA-700A0AE	Detail, 1.27mm, SCA-2 connector	January-00		CE-2.3
EIA-700A0AF	Detail, .8mm, VHDCI connector	July-00		CE-2.3
EIA-700A0AG	Detail, High Density Blade Connector 396/556 pins/contacts		SP3702: Not published	CE-2.3
EIA-700AAAA	Detail, 1.27mm, ribbon contact, trapezoidal, shielded I/O		SP2942-A: ?	CE-2.3
EIA-700AAAB	Detail, 1mm Parallel Board Connectors	April-96	Needs to be reviewed.	CE-2.3
EIA-700B000	Sectional, Rectangular/Trapezoidal Connectors	May-99		CE-2.4
EIA-700BA00	Blank, Rectangular/Trapezoidal Connectors	September-98	Needs to be reviewed.	CE-2.4
EIA-700BAAA	Detail, Blind-mate, Scoop-Proof, Large, Rect. Spacecraft Use Connectors		SP3322: Not published	CE-2.4
EIA-700BAAB	Detail, Blind-mate, Scoop-Proof, Small, Rect. Spacecraft Use Connectors		SP3323: Not published	CE-2.4
EIA-700BAAC	Detail, Blind-mate, Scoop-Proof, Subminiature, rectangular, Spacecraft Use Connectors		SP3444: Not published	CE-2.4
EIA-700BAAD	Detail, Shielded Rect., USB+Power Series "A" Connectors	May-00		CE-2.4
EIA-700BAAE	Detail, Shielded Rect., USB+Power Series "B" Connectors	May-00		CE-2.4
EIA-700C000	Sectional, Circular Multicontact Connectors	January-97	Needs to be reviewed.	CE-2.2
EIA-700D000	Sectional, Discrete Contacts	January-98	Needs to be reviewed.	CE-2.2
EIA-700D0AA	Detail, High Density Tuning Fork Contacts		SP3703: Not published	
EIA-700DA00	Blank, Discrete Contacts		SP3458: Not published	

EIA/IS-84	Detail, 2.5mm Two Part Connectors	April-92	Needs to be reviewed.	
EIA-616	2mm Two Part Backplane Connectors	October-96	Undergoing revision	CE-2.3
EIA-622	Glossary of Electrical Connector Related Terms	January-95	Being updated	STG-13-2
EIA-710	Requirements Guide for Space Grade Electrical Connectors	October-97	Needs to be reviewed	
EIA/IS-753	Two-Part High Density Blade and Backplane Tuning Fork Connector	February-98	Needs to be reviewed	

10/8/2003

## ATTACHMENT 2

October 2003

For many years EIA and the government have been working to harmonize MIL-STD-1344 and EIA 364 test DSCC REPORT procedures. The effort is nearing completion. All of the MIL-STD-1344 test methods are mirrored in EIA 364 test procedures and all of the appropriate test procedures have been adopted by DoD. MIL-STD-1344 is on the verge of cancellation. In anticipation of the cancellation of MIL-STD-1344 DSCC has begun replacing MIL-STD-1344 test methods referenced in our documents by the appropriate EIA 364 test procedure. At present DSCC has 27 standardization projects open on documents that reference 1344; suppression of 1344 will be coordinated during the project process. Projects will be initiated on the remaining 45 documents as workload permits.

Richard L. Taylor  
Chief  
Interconnection Devices Team

### **ATTACHMENT NO. 3**

Meeting Report  
CE-2.1 Test Procedures  
October 8, 2003  
San Antonio, TX

Bill Peverill welcomed everyone, and said the meeting would be conducted following the published agenda.

1. The minutes of the May 12, 2003 Meeting in San Diego were approved.
2. Test Procedure Projects (By Project Numbers)

#### **SP-4896, TP-62A, Terminal Strength, (Carl Fritz)\*\***

**Report from Carl Fritz said the second ballot had 10 favorable ballots and one editorial comment from John Healy. This comment was resolved. The committee moved and approved to have the standard sent to EDEC ballot.**

#### **SP-4903 ,TP-56A, Resistance to Soldering Heat(Jeff Toran and Carl Fritz)**

**Jeff Toran reported that they had received ballots. One editorial comment from John Healy has been resolved. A negative vote was received from Max Peel (technical changes). The committee moved and approved to incorporate Max's changes and send the standard out on a third ballot as recommended by Jef**

#### **SP-4918, TP-58, Temp Life With Mechanical Loading (Bill Upstone)**

**No report**

#### **PN-4942, TP-60, General Methods for Porosity Testing (John Healy)**

**This TP had insufficient votes for approval. The committee agreed to send it out again to obtain the necessary approvals. Ed Mikoski said he would assist in getting help from his staff.**

#### **PN-4945, TP-29, Contact Retention, (Bill Upstone & Rick Taylor)**

**No report**

#### **PN-4963, TP-60, MFG (Max Peel)**

**Max Peel reported that he had received a number of editorial comments and a few other comments. He would like to table the other comments for a future revision including cleaning of coupons. The current project addresses standardization of the gas formulation and elimination of the silver coupons. He would like to incorporate the editorial changes and proceed with an SP (pink ballot). The committee moved and approved to have the document sent out for standards approval (Pink Ballot)**

3. Test Procedures Awaiting Project Numbers (By TP Number)

**TP-12, Restricted Entry, (Bill Upstone & Rick Taylor)\*\***  
No report

**TP-15, Contact Strength, (Al Davis)\*\***  
No report.

**TP-17, Temperature Life (Max Peel & Vince Pascucci)**  
No report.

**TP-18, Visual Inspection, (Frank Ruffino)\*\***  
No report

**TP-31, Humidity, (Max Peel/Frank Ruffino)**  
Max Peel reported that he hopes to have the revised TP ready for balloting by November. There will be extensive changes addressing condensation problems with large workloads. The committee moved and approved to send the TP out on a letter ballot.

**TP-32C, Thermal Shock, (Max Peel/Frank Ruffino)**  
No report. However, Max Peel is working on a Thermal Cycling TP and said it is ready for balloting. The committee moved and approved to send this TP out on a letter ballot.

**TP-41C, Cable Flexing, (Max Peel)** Max Peel reported that this is on the back burner.

**TP-48A, Metallic Coating Thickness, (Ed Mikoski)**  
No report. Bill Peverill will contact Ed Mikoski to determine the status of this project.

**TP-55, Current Cycling, (Max Peel)\*\***  
Max Peel reported that this is on the back burner.

**TP-59, Low Temperature, (Frank Ruffino)\*\***  
No report

**TP-75, Lightning Strike, (Al Davis)**  
No report

**TP-81, Combustability of Connector Housings (Max Peel)**  
Max Peel reported that this TP does not need revision.

**TP-82, Corrosivity of Plastics (Max Peel)\*\***  
Max Peel reported that this TP does not need changing.

**\*\* Past due for 5 year review**

#### **4. STG Reports**

**A. STG-29-2.1 Performance Criteria(EIA-364-1000.01)-John Healey and Max Peel**

**SP 5038 had insufficient votes for approval. The committee decided to send it out again to obtain the necessary votes. Ed Mikoski said he would assist in getting help from his staff.**

**B. STG-32-2.1 Electronic (Signal) Test Methods-Jeff Toran  
No activity.**

#### **5. Other Business**

**A. MIL-STD-1344 Harmonization**

**Bill Peverill read a report from Dwight Tabit on late comments from the Military . They are:**

- 1. A request to substitute MIL-T-83133, Type JP-8 for Turbine Fluid, grade JP-5 per MIL-T-5624 in TP- 10. Reason: JP-5 is no longer available. On the surface this request seems reasonable.**
- 2. In TP-28, change test condition letter I to J. Reason: To agree with MIL-STD-1344**
- 3. In TP-20, Dielectric Withstanding Voltage, change leakage current to 5mA from .5 mA to agree with MIL-STD-1344. This change will require additional review by the committee. If not changed, this will require the Military to survey manufacturers to see if their products can meet the .5mA requirement.  
One possibility discussed, was to have two requirements, have one for commercial and one for military Products.**

**B. TS-100000.01. Max Peels concerns on the test sequences in this standard need to be forward to the committee**

#### **6. New Business**

**None**

**All actions taken by the subcommittee were moved and unanimously approved by the EIA CE-2.0 committee.**

**Respectively**

**Wm.Peverill  
CE-2.1  
Chairman**

**Attachment #4**  
**Meeting Report**  
**CE-2.9: Subcommittee on Sockets**  
**October 8, 2003**  
**San Antonio, TX**

Published Document

- SP-3877A-1: EIA-741: SFF 5.25" Disk Drives. Published May 2002.

Reaffirmed Documents

- SP-4970: EIA-540DAAA-A: Detail, DIP. (Ballot expired 8/27/01. Due to insufficient responses, reballoted with expiration of 3/25/02)
- SP-4971: EIA-700A0AB: 68-pin Memory Card Connector (Ballot expired 8/27/01. Due to insufficient responses, reballoted with expiration 3/25/02)

Pink Sheet Ballots

- SP-3874: Detail, SODIMM (Tyco is sponsor. New draft needed!)
- SP-4965: Rev. EIA-540B0AE: Detail Land Grid Array (Contech Research is sponsor. Update being prepared.)
- SP-4972: EIA-540B0AD: Low Pin Count LGA (Contech Research is sponsor. Plan to drop effort and incorporate information into SP-4965.)
- SP-4973: EIA-540B0AB: Low Pin Count BGA (Ballot expired 4/11/02)
- SP-4982: EIA-540000-A: Generic (Sent to HQ on 6/14/02; insufficient responses!)
- SP-4983: EIA-540BAAA-A: Detail, Mechanically Actuated PGA (Contech Research and FCI co-sponsors)

Draft Documents

- PN-4114: Rev. EIA-540FA00, (Streamlined) Blank, Multi-Package Modules (Molex is sponsor)

Five Year Review

- EIA-540C000: Sectional Relay Sockets (John Bruno of Deutsch is reviewing)
- EIA-540CA00: Blank, Relay Sockets (John Bruno of Deutsch is reviewing)
- EIA-540CAAA: Detail, 10A Relay Socket (John Bruno of Deutsch is reviewing)
- EIA-540CAAB: Detail, 5A Relay Socket (John Bruno of Deutsch is reviewing)
- EIA-700A0AC: Detail, 88-pin DRAM Connector (Will be sent out for review)
- EIA-674: Detail, SFF 1.8" Disk Drives (SFF is reviewing)
- EIA-675: Detail, SFF 1.3" Disk Drives (SFF is reviewing)
- EIA-676: Detail, SFF 1.8" (15mm) Disk Drives (SFF is reviewing)
- EIA-540A000-A: Sectional, Chip Carrier Sockets (Will be sent out for review)
- EIA-540AA00: Blank, Leadless Chip Carrier Sockets (Will be sent out for review)
- EIA-540AAAA: Detail, Type A Chip Carrier Sockets (Will be sent out for review)
- EIA-540AB00: Blank, PQFP (Will be sent out for review)
- EIA-540ABAA: Detail, PQFP (Will be sent out for review)
- EIA-540AC00: Blank, PCC (Will be sent out for review)
- EIA-540ACAA: Detail, PCC (Will be sent out for review)
- EIA-540AD00: Blank, Adaptor QFP to PGA (Will be sent out for review)
- EIA-540B000: Sectional, PGA (Will be sent out for review)
- EIA-540BA00: Blank, PGA (Will be sent out for review)
- EIA-540BAAB: Detail, Non-Mechanical PGA (Will be sent out for review)
- EIA-540BAAC: Detail, Flex Carrier PGA (Will be sent out for review)
- EIA-540D000-A: Sectional, In-Line Packages Will be sent out for review)
- EIA-540DA00: Blank, DIP (Will be sent out for review)
- EIA-540DAAB: Detail, Flex Carrier DIP (Will be sent out for review)

- EIA-540EA00: Blank, Round Sockets (Will be sent out for review)
- EIA-540EAAA: Detail, Round Sockets (Will be sent out for review)
- EIA-540F000: Sectional, Multi-Package Modules (Will be sent out for review)
- EIA-677: Detail, SFF Power Connector Pin Dimensions (SFF is reviewing)
- EIA-720: Detail, SFF 2.5" Disk Drives (SFF is reviewing)