# **SCSI-3 CONNECTOR**

**CLAUDE MOSLEY** 

IBM ROCHESTER, MN

が、減

JAN 13,1992

## **WORKING MEETING**

• TO DISCUSS THE ADDITION OF ATTRIBUTE TO THE SCSI-3 DOCUMENT

TO REACH AN AGREEMENT ON AN ADDITION

 THE CONNECTOR BEING DISCUSSED IS THE CONNECTOR ON RECORD IN THE SCCI-3 WORKING DOCUMENT

### WHY ATTRIBUTES

 TO SPECIFY A MINIMUM REQUIREMENT FOR BOTH THE USER AND THE SUPPLIER

PROMOTE QUALITY BEFORE COST

MORE CONSISTENCY AMONGST SUPPLIERS

#### **SCSI-3 INTERFACE**

UP TO 32 DEVICES

POSSIBLE 10 MEGA -TRANSFERS / SECOND

40 MEGA BYTE / SECOND

CO-EXIST ON SAME BUS AS SCSI-2

101

### **SCSI-3 USAGE**

ENTRY SYSTEMS

MID RANGE SYSTEMS

LARGE SYSTEMS

OEM DEVICES

517

### **COST OR QUALITY**

OEM AND ENTRY HAVE COST CONCERNS

• MID AND LARGE SYSTEMS NEED QUALITY FOR UNINTERRUPTED SYSTEM OPERATION

 IF QUALITY IS PUT FIRST THE COST WILL TAKE CARE OF ITSELF BY SETTING A LEVEL FOR ALL SUPPLIERS TO MEET

## ATTRIBUTES TO THE PIN PORTION

PIN -- .016 X .024 ON .050 CENTERS

MATING SURFACE TO HAVE A RADIUS OF 1,25 MAX

SURFACE FINISH TO N5 (RA OF 0,0004mm or 16uin.)
 OR BETTER

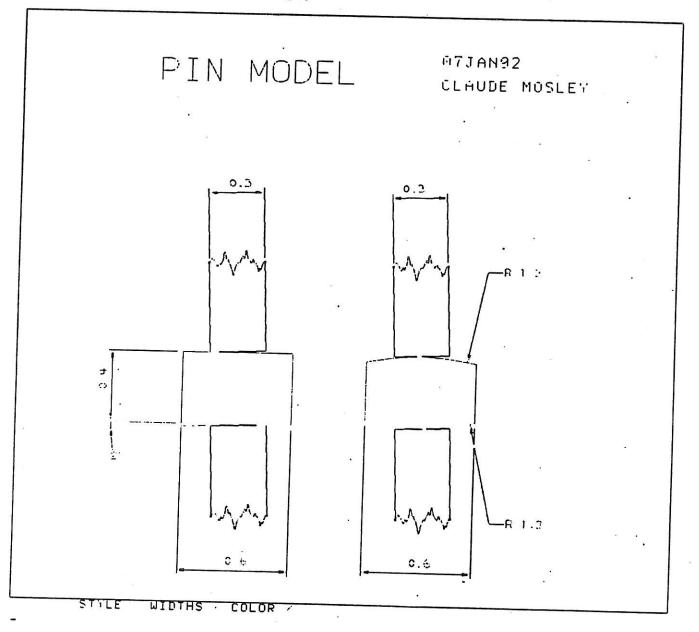


 PLATING ON THE ENTIRE MATING SURFACE TO BE A MINIMUM OF 0,000762(30uin) GOLD OVER 0,00127(50uin) NICKEL

## **PIN EXAMAPLES**

TYPE

SEL MENU VIEW PV SCL 100.0 WDO 1.179,.0



9

# ATTRIBUTES TO THE RECEPTACLE PORTION

- MUST BE A MULTI-WIPE CONTACT
  - FAILURE RATE IS THE MAJOR FACTOR

SURFACE FINISH TO BE N5 OR BETTER

 PLATING ON THE ENTIRE MATING SURFACE TO BE A MINIMUM OF 0,000762(30uin) GOLD 0,00127(50uin) OR BETTER

 NORMAL FORCE TO BE DEPENDENT ON THE CONTACT MATING SURFACE RADIUS PERPENDICULAR TO THE MATING SURFACE OF THE PIN

### **NORMAL FORCE**

PIN RADIUS IS ASSUMED TO BE 1,25(.050)

**RADIUS** 

**NORMAL FORCE** 

0,76(,030)

.58 NEWTONS(65 GRAMS)

1,02(.040) .72 NEWTONS(80 GRAMS)

1,27(.050)

.89 NEWTONS(100 GRAMS)

# AS A CONNECTOR SYSTEM

- CONNECTOR TO HAVE A MINIMUM WIPE LENGTH OF 2,0 mm(.079)
- CONNECTOR TO BE CAPABLE OF 50 MATING AND UNMATING CYCLES WITHOUT WEAR THRU OF THE NOBLE PLATING
- INSERTION FORCE TO BE LESS THAN 1 NEWTON (3.5oz)
- INSULATION RESISTANCE TO BE 1000 MEGOHMS
  MINIMUM
- DIELECTRIC WITHSTANDING VOLTAGE TO BE 250 VAC
  MINIMUM
- A MAXIMUM OF 8% OF THE CONTACTS MAY CONTAIN A PORE IN THE PLATING IN CONTACT ZONE

#### **ASSUMPTIONS**

- THAT THE WORKMANSHIP OF THE CONNECTOR SYSTEM ALLOWS ALL OF THE ATTRIBUTES TO FUNCTION AS A QUALITY DESIGN.
- THIS ASSUMES THAT ALL THE PARTS ARE PROPERLY POSITIONED AND THE CORRECT AMOUNT OF CLEARANCES ARE AVAILABLE

မ