

|                   |            |                                                                           |                    |
|-------------------|------------|---------------------------------------------------------------------------|--------------------|
| ENGINEERING DEPT. |            | PRODUCT SPECIFICATION<br>For 1.27 mm (.050") Pin Header of<br>System CH60 | SPEC.NO.: SPCH060B |
| REVISIONS         | ECNT120150 |                                                                           | PAGE: 1/3          |

1. SCOPE:

This specification contains the test requirement of subject pin headers when tested under the condition and below standards base on CviLux test procedure

2. APPLICABLE STANDARDS:

|                 |                                                                               |
|-----------------|-------------------------------------------------------------------------------|
| MIL - STD - 202 | Methods for test of connectors for electronic equipment                       |
| EIA - 364       | Test methods for electrical connectors                                        |
| JIS - C - 5402  | Methods for test of connectors for electronic equipment                       |
| UL 94           | Test for flammability of plastic materials for parts in devices and appliance |
| J-STD-020       | Resistance to soldering Temperature for through hole Mounted Devices          |
| SS-00254        | Test methods for electronic components ,LEAD-FREE soldering                   |
|                 | Part design standards                                                         |

3. APPLICABLE SERIES NO.: **CH60 SERIES**

4. SHAPE, CONSTRUCTION AND DIMENSIONS

See attached drawings

5. MATERIALS

See attached drawings

6. ACCOMMODATED P.C.BOARD

(P.C. Board on which the Pin Header are installed), 1.6 mm (.063")

7. CUSTOMER:F2E015

REVIEWED : Eisley APPROVED : Sun VERIFIED : Jessie .

|                          |                   |                                                                                                |                           |
|--------------------------|-------------------|------------------------------------------------------------------------------------------------|---------------------------|
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**7. ELECTRICAL PERFORMANCE:**

|     | ITEM                      | TEST CONDITION                                            | REQUIREMENT         |
|-----|---------------------------|-----------------------------------------------------------|---------------------|
| 7.1 | Rated current and voltage |                                                           | 1A 250V AC (r.m.s.) |
| 7.2 | Contact resistance        | Dry circuit of DC 20 mV max. , 100 mA max.                | Less than 20 mΩ     |
| 7.3 | Dielectric strength       | When applied AC 500 V 1minute between adjacent terminal   | No change           |
| 7.4 | Insulation resistance     | When applied DC 500 V between adjacent terminal or ground | More than 5000 MΩ   |

**8. MECHANICAL PERFORMANCE:**

|     | ITEM                | TEST CONDITION                                               | REQUIREMENT       |
|-----|---------------------|--------------------------------------------------------------|-------------------|
| 8.1 | Pin retention force | Push pin from insulator base at speed<br>25± 3 mm per minute | More than 0.4 Kgf |

**9. ENVIRONMENTAL PERFORMANCE:**

|     | ITEM                         | TEST CONDITION                                                                                                                                                                        | REQUIREMENT                                                                                                            |
|-----|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| 9.1 | Solder ability               | Soldering time: 3 ± 0.5 second<br>Soldering pot: 245 ± 5 °C                                                                                                                           | Minimum:<br>90% of immersed area                                                                                       |
| 9.2 | Resistance to soldering heat | Soldering time: 20 second Max.<br>Soldering pot: 250~260 °C<br>Refer Reflow temperature profile(11.1)                                                                                 | No damage                                                                                                              |
| 9.3 | Heat aging                   | 105± 2 °C, 96 hours                                                                                                                                                                   | No damage                                                                                                              |
| 9.4 | Humidity                     | 40± 2 °C, 90-95% RH, 96 hours<br>measurement must be taken within 30 min.<br>after tested                                                                                             | Appearance: No damage<br>Contact resistance:<br>Less than twice of initial<br>Dielectric strength:<br>To pass para 7-3 |
| 9.5 | Temperature cycling          | One cycle consists of :<br>(1)-40 <sup>+0</sup> <sub>-3</sub> °C , 30 min.<br>(2)Room temp. 10-15 min.<br>(3) 85 <sup>+3</sup> <sub>-0</sub> °C , 30 min.<br>(4)Room temp. 10-15 min. | Appearance: No damage<br>Contact resistance:<br>Less than twice of initial                                             |

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|     | ITEM       | TEST CONDITION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | REQUIREMENT                                                                           |
|-----|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 9.6 | Salt spray | <p>Temperature: <math>35 \pm 3^{\circ}\text{C}</math><br/> Solution: <math>5 \pm 1\%</math><br/> Spray time: <math>48 \pm 4</math> hours<br/> (Stamping before plated)<br/> Spray time: <math>24 \pm 4</math> hours<br/> (Stamping after plated)<br/> Mate connectors and expose to the following salt mist conditions. Upon completion of the exposure period, salt deposits shall be removed by a gentle wash or dip in running water and dried naturally, after which the specified measurements shall be performed.<br/> The specimens shall be suspended from the top using waxed twine, string or nylon thread.<br/> The test only define the plating area, without plating area (as copper cross section) will not be defined.<br/> (EIA 364-26B / MIL-STD-202 Method 101)</p> | <p>Appearance: No damage<br/> Contact resistance:<br/> Less than twice of initial</p> |

10. AMBIENT TEMPERATURE RANGE:  $-40$  to  $+105^{\circ}\text{C}$

11. Recommended IR Reflow Temperature Profile:

11.1 Using Lead-Free Solder Paste

