



ECR #: 2023-01-002      Issue Date: 1/09/2023      Originator: Phil Wills

Program and/or Customer Name: TM4301 4.3" touchscreen

Part Numbers Affected: 90-00123-A0

New Part Number or Revision Number: 90-00123-C0

**Type of Request (check all that apply)**

- |  |   |   |
|--|---|---|
| <input checked="" type="checkbox"/> Design                 | <input checked="" type="checkbox"/> Clerical              | <input type="checkbox"/> Test Procedure |
| <input checked="" type="checkbox"/> Manufacturing/Assembly | <input type="checkbox"/> Data Sheet                       | <input type="checkbox"/> Tooling        |
| <input checked="" type="checkbox"/> BOM Change             | <input checked="" type="checkbox"/> Procured Part Change  | Software, Firmware, Config Settings     |
| <input type="checkbox"/> Cost Reduction                    | <input type="checkbox"/> Regulatory (UL, CE, FCC, etc...) | Other: _____                            |

**Detailed description of changes requested.** Attach documents as needed

Due to severe supply chain disruptions in the IC industry, we are facing very long lead times and missed ship dates for existing purchase orders. We need to add alternate sources for ICs where possible to avoid material shortages.

Change touchscreen controller from ATMXT336T to ATMXT640T. Both IC's use the same communication protocol. The device ID will change from 0x15 to 0X02. The ATMXT336T was located on a separate daughter board. The ATMX640T is located on the touchsensor FPC (Chip on Flex).

Change 1-Wire IC where module ID is stored from Maxim DS2433 to Microchip AT21CS01. This only effects designs that read the 1-wire IC to confirm which display model is connected. The Microchip driver was already modified to support this change for the TM5000

Change LCD driver IC from Himax 8257-A to Sitronix ST7282-G4. This change should be transparent. One minor difference is that on the original driver IC DE would float high (LCD enabled) when left floating. For the new IC DE must be driven high to enable the LCD. The Microchip driver was already modified to support this change for the TM5000.


**Change Affects (check all that apply)**

- |  |  |   |
|--|--|---|
| <input checked="" type="checkbox"/> New Production | <input type="checkbox"/> Finished Inventory – Scrap  | <input type="checkbox"/> Product Recall |
| <input type="checkbox"/> Work In Process – Scrap   | <input type="checkbox"/> Finished Inventory – Rework | <input type="checkbox"/> Other: _____   |
| <input type="checkbox"/> Work in Process – Rework  | <input type="checkbox"/> Field Upgrade               | <input type="checkbox"/> Other: _____   |


Implementation Date: January 9, 2023


Implementation Lot Code (if applicable): 2302

**Approvals**

Originator: Phil Wills  Date: 2/13/23

Engineering: Greg Sullivan \_\_\_\_\_ Date: \_\_\_\_\_

Manufacturing: Phil Wills  Date: 2/13/23

Quality: Phil Wills  Date: 2/13/23

**Customer Approvals (if applicable)**

Program Manager: \_\_\_\_\_ Date: \_\_\_\_\_

Engineering: \_\_\_\_\_ Date: \_\_\_\_\_

Manufacturing: \_\_\_\_\_ Date: \_\_\_\_\_

Quality: \_\_\_\_\_ Date: \_\_\_\_\_