

uEZGUI-4088-43WQN
uEZGUI-4088-43WQH
uEZGUI-4088-43WQE

Product Change Notification Form

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| PCN Number: 20160119-01 | Rev: 2.0 | Date: 01/19/16 |
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Summary of Change: A series of updates have been made to the products affected (see table below) to include an enhanced LCD panel, modified 32.768 KHz crystal footprint, substituted accelerometer, additional ESD protection and off-board speaker connector.

Reason for Change: FDI must replace the Freescale MMA7455L accelerometer used in the products affected as a result of Freescale Semiconductor's announcement that the part has been discontinued. In addition to this requirement, FDI updated the off-board speaker connector for better part retention and compatibility with connector options; upgraded the LCD panel for enhanced specifications; added ESD protection; and modified the crystal oscillator footprint to better match manufacturer recommendations. FDI believes each of these product changes will benefit our customers and may also result in improved manufacturing yields.

Detailed Description of Change:

The accelerometer (U14) has been changed from a Freescale MMA7455L to an ST Micro LIS3DH. The LIS3DH accelerometer has improved user-selectable scales of $\pm 2g/\pm 4g/\pm 8g/\pm 16g$ and is capable of measuring accelerations with output data rates from 1 Hz to 5 KHz. The LIS3DH allows for a wider operating voltage range of 1.71V to 3.6V. The LIS3DH is an LGA footprint and operates over an extended temperature range from -40 °C to +85 °C.

The LIS3DH uses a new I2C address. All documentation for the products affected have been updated to reflect this change. The uEZ® software driver for the accelerometer has been updated to version 2.07b to support the LIS3DH and is compatible at the API level. Customer application firmware should not be affected by this change. Autodetection of the accelerometer by the uEZ driver for correct driver load is an added benefit of using a unique I2C address.

The off-board speaker connector (J7) footprint was changed for better part retention, enlarging solder pads and allowing for multiple connector options to be used. The new connector footprint is compatible with the existing connector used and allows for better connector retention by increasing the pad area.

For the PCAP model, the LCD was upgraded from Newhaven Display NHD-4.3-480272EF-ATXL#-CTP to NHD-4.3-480272EF-ASXV#-CTP. The new display has better specifications in the typical viewing angle (75 degrees, improved from 70 degrees) and luminance (850 nits typical, up from 340 nits). Resistive and non-touch models were initially released with the enhanced display, so they are already upgraded.

Per new recommended manufacturer specifications, the 32.768 KHz crystal (Y3) PCB footprint has been updated for 1.5mm between pads, pad width of 1.0mm and pad length of 1.8mm.

Add ESD protection device to the analog signals utilized by the resistive touch model to improve reliability.

Detailed Description of (Electrical) Change: No electrical changes were made in this revision.

Products Affected:

| Affected Product (Rev 1.3) | Recommended Replacement Product (Rev 2.0) |
|----------------------------|---|
| uEZGUI-4088-43WQN | uEZGUI-4088-43WQN |
| uEZGUI-4088-43WQN-BA | uEZGUI-4088-43WQN-BA |
| uEZGUI-4088-43WQN-NXP | uEZGUI-4088-43WQN-NXP |
| uEZGUI-4088-43WQE | uEZGUI-4088-43WQE |
| uEZGUI-4088-43WQE-BA | uEZGUI-4088-43WQE-BA |
| uEZGUI-4088-43WQH | uEZGUI-4088-43WQH |
| uEZGUI-4088-43WQH-BA | uEZGUI-4088-43WQH-BA |

Availability of new revision stock at distributors:

Distributors will continue to sell through their existing available stock before filling customers' orders with stock of the new revision of the product.

Forecasted Key Dates and Milestones:

01/19/16 PCN Date. The date this document was released for distribution to customers and distributors.

01/19/16 Production Date for Recommended Replacement Product. The first date that production quantities of the replacement units will be available for customer order.

Reference Documents: <http://www.teamfdi.com/product-details/uezgui-4088-43wqn-ba>

<http://www.teamfdi.com/product-details/uezgui-4088-43wqh-ba>

<http://www.teamfdi.com/product-details/uezgui-4088-43wqe-ba>

1. [Freescale Product Discontinuance Notice MMA7455L](#) [LINK]
2. [uEZGUI-4088-43WQN H E User Manual](#) [LINK]
3. [uEZGUI-4088-43WQN SCH 2](#) [LINK]
4. [uEZGUI-4088-43WQN Rev 2 ECO](#) [LINK]

Above SCH and ECO apply to: uEZGUI-4088-43WQN, uEZGUI-4088-43WQH, uEZGUI-4088-43WQE



FDI Contacts:

For additional information or details please contact any of our franchised Distributors including Avnet, Digi-Key, Mouser, and WPG Americas, Inc. Or contact the Product Team at FDI directly via email at support@teamfdi.com or via phone at 256-883-1240 or fax at 256-883-1241.