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## Product Change Notification

**PCN No:** 2011-01-24-04  
**Report Date:** January 24, 2011  
**Subject:** GLT240128 /-USB /-422 PCB Rev 4.0  
Firmware Version v8.1 Release

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### List of New / Changed Products:

All the following Graphic displays (and their variants):

|                                   |
|-----------------------------------|
| GLT240128 /-USB /-422 PCB Rev 4.0 |
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### Reason for Change:

We are now implementing a bigger file system to accommodate more user defined fonts and bitmaps.

### Product Change:

The following list of firmware changes are all effective on all the variants of the graphic displays as stated under 'List of New / Changed Products'.

### Firmware Changes:

| Display                          | New Firmware Version |
|----------------------------------|----------------------|
| GLT240128 /-USB/-422 PCB Rev 4.0 | v8.1                 |

### Schedule of Change:

February 1, 2011

## **New Released Firmware v8.1:**

In version v8.0 (previously released version, [PCN 20101008-01](#)) although a 256KB flash part is populated for fonts and bitmaps on the module, we kept the file system down to 64KB to be able to have full compatibility with lower PCB Rev (3.0 and below) and older firmware versions (v7.0 and below); such that uploads of fonts and bitmaps, and re-calling / drawing them on the screen stay the same.

We are now implementing the full capacity of the 256KB flash part. This change affects some of the file system commands:

**Upload a Bitmap File** – this command now takes 6 bytes for parameters, before the data string via the upload protocol. The command is now:  
254 / 94 / 2 byte File ID (LSB first) / 4 byte File Length (LSB first) / <data string>

**Draw a Bitmap from Memory** – this command now takes 4 bytes for parameters. The command is now:  
254 / 98 / 2 byte File ID (LSB first) / X / Y

**Upload a Font File** – this command now takes 6 bytes for parameters, before the data string via the upload protocol. The command is now:  
254 / 36 / 2 byte File ID (LSB first) / 4 byte File Length (LSB first) / <data string>

**Set the Current Font** – this command now takes 2 bytes for parameters. The command is now:  
254 / 49 / 2 byte File ID (LSB first)

**Delete a File** – this command now takes 3 bytes for parameters. The command is now:  
254 / 173 / 1 byte Type / 2 byte File ID (LSB first)

**Get File System Directory** – this command returns 2 bytes of the number of maximum directory entries (LSB first) then the actual directory, which now consists of 8 bytes per entry.

**Download a File** – this command now 3 bytes for parameters. The command is now:

254 / 178 / 1 byte Type / 2 byte File ID (LSB first)

**Move a File** – this command now 6 bytes for parameters. The command is now:

254 / 180 / 1 byte Old Type / 2 byte Old File ID (LSB first) / 1 byte New Type / 2 byte New File ID (LSB first)

To update the firmware on your display module, please use [mogd#](#) and get the latest [GLT Series firmware](#) from our website. Please see the Firmware Upgrade section of the manual.

## Documentation Revision

| Revision | Changes         | Date          | Author    |
|----------|-----------------|---------------|-----------|
| 1.0      | Initial Release | January 24/11 | R Malinis |

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## Reference Documents/Attachments:

Location: <http://www.matrixorbital.ca/manuals/>

## Approvals:

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