AVNET EMBEDDED SPECIFICATION.

Datasheet
Varitronix
MGLS12864T
Specification of LCD Module type

MGLS – 12864T

1. General Description

- Small Form Factor Full Graphics 128 x 64 pixels
- Integral Controller/Driver type T6963C......not available on all resolutions(application note available on request)
- STN, FSTN** Positive and Negative mode**
- Optional LED Backlight (note including Backlight will increase height of module (see drawing)
- Variety of Backlight colours Green, White**, Blue**, Red**, Amber **
- Temperature Ranges 0 to 50°C, -20 to 70°C**
- View angle 6 o’clock other options on special request**

** Items marked are non standard options, and may carry factory MOQ. Please check with your local sales office for availability of the options.

2. Mechanical Specifications

Table 1

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specifications</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outline Dimensions</td>
<td>78.0 (W) x 70.0 (H) x 13.5 (D) max</td>
<td>mm</td>
</tr>
<tr>
<td></td>
<td><strong>NOTE Depth (D) is lower without Backlight</strong></td>
<td></td>
</tr>
<tr>
<td>View Area VA</td>
<td>62.0 (W) x 44.0 (H)</td>
<td>mm</td>
</tr>
<tr>
<td>Format</td>
<td>128 (W) x 64 (H) Pixels</td>
<td></td>
</tr>
<tr>
<td>Pixel Size</td>
<td>0.39 (W) x 0.55 (H)</td>
<td>mm</td>
</tr>
<tr>
<td>Pixel Spacing</td>
<td>0.05 (W) x 0.05 (H)</td>
<td>mm</td>
</tr>
<tr>
<td>Pixel Pitch</td>
<td>0.44 (W) x 0.60 (H)</td>
<td>mm</td>
</tr>
<tr>
<td>Active Area</td>
<td>56.27 (W) x 38.35 (H)</td>
<td>mm</td>
</tr>
</tbody>
</table>
3. Interface Signals

Table 2

<table>
<thead>
<tr>
<th>Pin No.</th>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>FG</td>
<td>Frame ground (see note 1).</td>
</tr>
<tr>
<td>2</td>
<td>VSS</td>
<td>Ground (0V).</td>
</tr>
<tr>
<td>3</td>
<td>VDD</td>
<td>Power supply for logic (+5V).</td>
</tr>
<tr>
<td>4</td>
<td>V0</td>
<td>Power supply for LCD drive</td>
</tr>
<tr>
<td>5</td>
<td>/WR</td>
<td>Data Write. Write data into T6963C when /WR=&quot;Low&quot;.</td>
</tr>
<tr>
<td>6</td>
<td>/RD</td>
<td>Data Read. Read data from T6963C when /RD=&quot;Low&quot;.</td>
</tr>
<tr>
<td>7</td>
<td>/CE</td>
<td>Chip enable for T6963C. /CE must be “Low” when CPU communicates with T6963C.</td>
</tr>
<tr>
<td>9</td>
<td>/RST</td>
<td>“High”: Normal (T6963C has internal pull-up resistor). “Low”: Initialize T6963C. Text and graphic have addresses and text and graphic area settings are retained.</td>
</tr>
<tr>
<td>10</td>
<td>DB0</td>
<td>Data input/output (LSB).</td>
</tr>
<tr>
<td>11</td>
<td>DB1</td>
<td>Data input/output.</td>
</tr>
<tr>
<td>12</td>
<td>DB2</td>
<td>Data input/output.</td>
</tr>
<tr>
<td>13</td>
<td>DB3</td>
<td>Data input/output.</td>
</tr>
<tr>
<td>14</td>
<td>DB4</td>
<td>Data input/output.</td>
</tr>
<tr>
<td>15</td>
<td>DB5</td>
<td>Data input/output.</td>
</tr>
<tr>
<td>16</td>
<td>DB6</td>
<td>Data input/output.</td>
</tr>
<tr>
<td>17</td>
<td>DB7</td>
<td>Data input/output (MSB).</td>
</tr>
<tr>
<td>18</td>
<td>FS</td>
<td>Font select. “High” for 6 x 8 font &amp; “Low” for 8 x 8 font.</td>
</tr>
<tr>
<td>-</td>
<td>A</td>
<td>Anode of backlight</td>
</tr>
<tr>
<td>-</td>
<td>K</td>
<td>Cathode of backlight</td>
</tr>
</tbody>
</table>

Note 1: This pin is electrically connected to the metal bezel (frame). User can choose to connect this pin to VSS or leave it open.

Typical ordering code MGLS 12864T LV LED03

This is STN Display (S), Transflective, Green Mode, Yellow Green LED Edge style Backlight, Standard Temperature Range (LV), 6 o’clock View.

Full part number and full specification will be confirmed dependant on the option selected i.e.

Display type, LED Type and Colour, Temperature Range etc

END
www.avnet-embedded.eu

AVNET EMBEDDED OFFICES.

DENMARK
Avnet Embedded
Avnet Nortec A/S
Ellekær 9
2730 Herlev
Phone: +45 3678 6250
Fax: +45 3678 6255
denmark@avnet-embedded.eu

FINLAND
Avnet Embedded
Avnet Nortec Oy
Tiilenpolttajankuja 3 A B
1720 Vantaa
Phone: +358 207 499260
Fax: +358 942 597446
finland@avnet-embedded.eu

FRANCE
Avnet Embedded
Avnet EMG France SA
Immeuble 154, Parc Chene 2
5, allée du General Benoist
69000 Bron
Phone: +33 4 72 81 02 30
Fax: +33 4 72 81 02 34
bron@avnet-embedded.eu

Avnet Embedded
Avnet EMG France SA
6-8, rue Ambroise Croizat
ZAE Les Glaises
91127 Palaiseau Cedex
Phone: +33 1 64 47 29 29
Fax: +33 1 64 47 99 99
palaiseau@avnet-embedded.eu

Avnet Embedded
Avnet EMG France SA
ZA la Hatelais le Semiramis 2, allée du Communal
35770 Vern sur Seiche
Phone: +33 2 99 77 37 00
Fax: +33 2 99 77 33 38
rennes@avnet-embedded.eu

GERMANY (AUSTRIA, CZECH REPUBLIC, HUNGARY, POLAND, SWITZERLAND)
Avnet Embedded
Avnet EMG GmbH
Gruber Straße 60c
85586 Poing
Phone: +49 8121 775 500
Fax: +49 8121 775 550
poing@avnet-embedded.eu

Avnet Embedded
Avnet EMG GmbH
Lötscher Weg 66
41334 Nettetal
Phone: +49 8121 775 500
Fax: +49 8121 775 550
nettetal@avnet-embedded.eu

ITALY (PORTUGAL, SPAIN)
Avnet Embedded
Avnet EMG Italy SRL
Via Manzoni, 44
20095 Cusano Milanino
Phone: +39 02 66092 1
Fax: +39 02 66092 498
milano@avnet-embedded.eu

NETHERLANDS (BELGIUM, LUXEMBOURG)
Avnet Embedded
Avnet B.V.
Takkebijsters 2
4802 BL Breda
Phone: +31 76 5722400
Fax: +31 76 5722404
benelux@avnet-embedded.eu

SWEDEN (NORWAY)
Avnet Embedded
Avnet Nortec AB
Esplanaden 3D
172 47 Sundbyberg
Phone: +46 8 564 725 50
Fax: +46 8 760 01 10
sweden@avnet-embedded.eu

SWEDEN (NORWAY)
Avnet Embedded
Avnet Nortec AB
Esplanaden 3D
172 47 Sundbyberg
Phone: +46 8 564 725 50
Fax: +46 8 760 01 10
sweden@avnet-embedded.eu

UNITED KINGDOM (IRELAND)
Avnet Embedded
Avnet EMG Ltd.
Pilgrims Court, 15/17 West Street
Reigate, Surrey, RH2 9BL
Phone: +44 1737 227800
Fax: +44 1737 243872
uk@avnet-embedded.eu

All trademarks and logos are the property of their respective owners. This document provides a brief overview only and is not intended to be complete or binding offer. Product information, including information related to a product’s specifications, uses or conformance with legal or other requirements, is obtained by Avnet from its suppliers or other sources deemed reliable and is provided by Avnet on an „As is“ basis. Avnet makes no representation as to the accuracy or completeness of the product information and Avnet disclaims all representations, warranties and liabilities under any theory with respect to the product information, including any implied warranties of merchantability, fitness for a particular purpose, title and/or non-infringement. All product information is subject to change without notice.