PROM PROGRAMMING FLOW

Cobham (formerly Aeroflex) Colorado Springs UT28F256QLE/L and UT28F256LVQLE/L do not require any Post-Program Conditioning. **NOTE:** Many customers have purchased Cobham formerly Aeroflex's Legacy PROMs - **DO NOT** use the Post Programming kit that was provided with the Legacy PROMs. The UT28F256QLE/L and UT28F256LVQLE/L will be **damaged** if connected to the burn-in stimulus card.

ALGORITHM DOWNLOAD:

Go to [www.bpmmicro.com](http://www.bpmmicro.com).
Under software select Downloads.
Register and then login
Select BPWIN (approx. 56MB file size)
Install BPWIN

*Note: Software versions 4.61 or higher are approved releases.*

PROGRAMMING:

To select a device hit the Device tab below and type in Aeroflex and then highlight the device type you want to program. To load data pattern hit the Data Pattern tab below.

Use default settings for Device Config. (Set 1 wide, 1 bank; Mode: Sets)

Be sure that Continuity, Blank Check and Verify are checked. Set Verify to Twice. Hit the PROGRAM tab to start programming the device.
Programming times can vary from 60 to 240 minutes depending on the number of bits that will be programmed. If the device fails verify, discard the part. When programming is complete a security fuse is blown which will disable all test modes used during programming. Trying to program a second block will not work since the test modes have been disabled.

Reference Cobham Application Note “QLE Programming Notes” for more programming information.

**NOTE:** The information in bold letters is the actual algorithm name. The information below each algorithm name are the products supported by that algorithm.

Rev. E material is identified by WE10A (3.3V), WE30E (3.3V), WE40E (3.3V), WE20A (5.0V), WE50E (5.0V), or WE60E (5.0V) on the package lid.

**SOCKET MODULE:**
SM28FLPA, used for both UT28F256QLE UT28F256QLEL and UT28F256LVQLE UT28F256LVQLEL

**PROGRAMMERS:**
*BP-1400 Full Support
*BP-1400/84 Full Support
BP-1410 Full Support
BP-1410/84 Full Support
*BP-1600 Full Support
BP-1610 Full Support
*BP-1700 Full Support
BP-1710 Full Support
*BP-2600 Full Support
BP-2610 Full Support

* Programmer end of life by manufacturer, reference BPM Microsystems website [www.bpmmicro.com](http://www.bpmmicro.com) and search end of life for more information.
SYSTEMS TECHNICAL SUPPORT UT28F256QLE/L AND UT28F256LVQLE/L PROM ALIGNMENT WITHIN CARRIER

The following diagram shows the alignment of the UT28F256QLE and UT28F256LVQLE PROMs within its carrier. It is very important that the PROM is properly aligned in the carrier during programming. If you attempt to program the PROM when it is not properly aligned, the BP Microsystems programmer will fail continuity check.

Figure 1. Diagram of the UT28F256QLE/L and UT28F256LVQLE/L PROM 28-Pin Flat Pack in Carrier
Cobham Proprietary

Cobham Semiconductor Solutions – Application Note

Revision History

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision</th>
<th>Author</th>
<th>Change Description</th>
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</thead>
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<td>04/07/2011</td>
<td>1.0.0</td>
<td>MJL</td>
<td>Initial Revision Tracking Revision</td>
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<tr>
<td>06/05/2020</td>
<td>1.1.0</td>
<td>MJL</td>
<td>Converted format to current Cobahm Template. Added UT28F256QLEL and UT28F256LVQLEL product for Suntek. Updated the BPM Microsystem programmer end of life notes</td>
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