

## Product Software Roadmap

Logic PD's board support packages (BSPs) are developed using processes compliant with the ISO 13485 medical system standard. These BSPs are used by a wide variety of customers in a wide variety of industries for a wide variety of products. Because of this, every effort is made to ensure that feature sets, high-level architecture, detailed designs, power and performance characteristics, integration, and system testing provide a robust and reliable base for our customers to develop highly-differentiated products quickly. With this in mind, we provide the following types of software documentation in addition to this Product Software Roadmap:

- **Product Software Test Plans and Reports.** After a BSP is released, all release artifacts are available on the [Logic PD support site](#).<sup>1</sup> Each BSP includes a Software Test Plan and Software Test Report,<sup>2</sup> that can be used to understand how each feature in the BSP was tested.
- **Product Software Process Documentation.** Under NDA, additional software process documentation such as requirements and traceability documents can be made available. Please [contact Logic PD](#)<sup>3</sup> for more information.



### Android

Since Android was acquired by Google in 2005 and the Open Handset Alliance was formed in 2007, Android has grown tremendously in popularity in the consumer handset space. Because of the hybrid licensing model that Android uses (GPL v2 for the Linux kernel, Apache v2 for the middleware and application layers), Android has also become a considerable contender in non-consumer markets such as Industrial, Medical, Military, and Energy.

| Android Roadmap         | 2012 |    |    |    | 2013 |    |    |    | 2014 |    |    |    | 2015 |    |    |    | 2016 |    |    |    | Target Platforms |
|-------------------------|------|----|----|----|------|----|----|----|------|----|----|----|------|----|----|----|------|----|----|----|------------------|
|                         | Q1   | Q2 | Q3 | Q4 | Q1   | Q2 | Q3 | Q4 | Q1   | Q2 | Q3 | Q4 | Q1   | Q2 | Q3 | Q4 | Q1   | Q2 | Q3 | Q4 |                  |
| Android ICS 4.0         |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    | DM/AM37x         |
| Android Gingerbread 2.3 |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    | DM/AM37x         |
| Android Gingerbread 2.3 |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    | AM3517*          |
| Android Froyo 2.2       |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    | AM3517*, DM37x   |
| Android Éclair 2.1      |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    | OMAP35x**        |

\* *Provided by the semiconductor vendor*

\*\* *Demo image available at <http://www.logicpd.com/support/>. Full source available at <http://git.logicpd.com/>*



### Linux

Logic PD has a long history of providing premiere Linux BSPs and Design Service support for our products and for our customer's products. All of our existing platforms have free Linux BSPs. Linux as a platform for embedded systems has become quite mature. Logic PD has put Linux in dozens of high-reliability products for the industrial, medical, and consumer markets.

| Linux Roadmap | 2012 |    |    |    | 2013 |    |    |    | 2014 |    |    |    | 2015 |    |    |    | 2016 |    |    |    | Target Platforms               |
|---------------|------|----|----|----|------|----|----|----|------|----|----|----|------|----|----|----|------|----|----|----|--------------------------------|
|               | Q1   | Q2 | Q3 | Q4 | Q1   | Q2 | Q3 | Q4 | Q1   | Q2 | Q3 | Q4 | Q1   | Q2 | Q3 | Q4 | Q1   | Q2 | Q3 | Q4 |                                |
| Linux 3.x     |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    | DM/AM37x*                      |
| Linux 3.0.0   |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    | DM/AM37x                       |
| Linux 2.6.32  |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    | AM3517**, DM/AM37x             |
| Linux 2.6.32  |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    | OMAP-L138**, AM1808**, OMAP35x |

\* *Under consideration*

\*\* *Provided by the semiconductor vendor*



### Windows Embedded

Logic PD's product software roots are firmly in Windows Embedded. We provide Windows Embedded BSPs for most existing products, particularly those with external connectivity needs and rich user interface requirements where the .NET framework (and associated programmer productivity gains) can be leveraged. Logic PD has put Windows Embedded in a wide variety of systems for industrial, medical, military, and consumer markets.

| Windows Roadmap | 2012 |    |    |    | 2013 |    |    |    | 2014 |    |    |    | 2015 |    |    |    | 2016 |    |    |    | Target Platforms             |
|-----------------|------|----|----|----|------|----|----|----|------|----|----|----|------|----|----|----|------|----|----|----|------------------------------|
|                 | Q1   | Q2 | Q3 | Q4 | Q1   | Q2 | Q3 | Q4 | Q1   | Q2 | Q3 | Q4 | Q1   | Q2 | Q3 | Q4 | Q1   | Q2 | Q3 | Q4 |                              |
| WEC 7           |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    | AM3517*, OMAP35x*, DM/AM37x* |
| Windows CE 6.0  |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    | OMAP35x, DM/AM37x**          |
| Windows CE 6.0  |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    | OMAP-L138*, AM1808*, AM3517* |
| Windows CE 6.0  |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    | i.MX31                       |
| Windows CE 5.0  |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    |      |    |    |    | PXA270                       |

\* *Provided by the semiconductor vendor*

\*\* *Support limited to DM37/AM37x Torpedo SOM and DM37/AM37x SOM-LV. DM37/AM37x Torpedo + Wireless SOM is not supported.*

## Introduction

The remainder of this document describes detailed current and planned software availability for individual product families, and makes use of the following symbols:

| Symbol           | Meaning              | Notes                                                                                                                                     |
|------------------|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| +                | Functional           | Works as described in the Software Test Plan                                                                                              |
| ~                | Partially functional | May work under certain conditions, but has issues – see release notes for details                                                         |
| NA               | Not applicable       | Software support is not relevant to this platform                                                                                         |
| Contact Logic PD | Contact Logic PD     | May work, but additional explanation is required. Or, the feature has been done internally, but has not yet been made publicly available. |

For details on platforms not listed in the remainder of this document, please reference the BSP-specific release notes available on the [Logic PD support site](#)<sup>1</sup> or [contact Logic PD](#).<sup>3</sup>

<sup>1</sup> <http://support.logicpd.com/Home.aspx> — access to BSPs requires kit registration.

<sup>2</sup> Test plans and reports are available for recent products only; please [contact Logic PD](#) if you are interested in receiving copies of process documentation for older (prior to 2011) products.

<sup>3</sup> <http://www.logicpd.com/contact/inquiry/>

Texas Instruments DM3730 / AM3703 Software Roadmap

|               | TI DM/AM37x Software Roadmap                                            | G2.3.4 v1.3      | G2.3.4 v1.4      | ICS4.0.4 v1.0    | LPD 2.2-2        | LPD 2.3-2        | LPD 2.4-2        | LPD 3.0.1 BSP    | LPD 3.0.2 BSP    |
|---------------|-------------------------------------------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|               | Release Date                                                            | Nov 2012         | Feb 2013         | Available Today  | Oct 2012         | Feb 2013         | Available Today  | Aug 2011         | Available Today  |
|               | Operating System                                                        | Android          | Android          | Android          | Linux            | Linux            | Linux            | WinCE            | WinCE            |
|               | Community Baseline                                                      | Gingerbread      | Gingerbread      | ICS              | 3.0.0            | 3.0.0            | 3.0.0            | TI 6.15 BSP      | TI 6.15 BSP      |
|               | Documentation                                                           |                  |                  |                  |                  |                  |                  |                  |                  |
| Documentation | Logic PD Part Number                                                    | +                | +                | +                | +                | +                | +                | +                | +                |
|               | Kit Quickstart Guide                                                    | +                | +                | +                | +                | +                | +                | +                | +                |
|               | Kit User Guide                                                          | +                | +                | +                | +                | +                | +                | +                | +                |
|               | Software User Guide                                                     | +                | +                | +                | +                | +                | +                | +                | +                |
|               | Test Documents                                                          | +                | +                | +                | +                | +                | +                | +                | +                |
|               | Release Notes                                                           | +                | +                | +                | +                | +                | +                | +                | +                |
|               | Software Prerequisites                                                  | NA               | NA               | NA               | NA               | NA               | NA               | +                | +                |
|               | Driver Documents                                                        | Contact Logic PD | Contact Logic PD | Contact Logic PD | Contact Logic PD | Contact Logic PD | Contact Logic PD | +                | +                |
|               | Platform                                                                |                  |                  |                  |                  |                  |                  |                  |                  |
|               | Zoom SOM-LV Development Kit Support                                     | +                | +                | +                | +                | +                | +                | +                | +                |
|               | Zoom Torpedo Development Kit Support                                    | +                | +                | +                | +                | +                | +                | +                | +                |
|               | Torpedo & Torpedo +Wireless SOMs with 512MB LPDDR Support               | NA               | NA               | +                | NA               | NA               | +                | NA               | Torpedo only     |
|               | DM37x ES2.1, ES3.0, and ES3.1 Silicon Support                           | +                | +                | +                | +                | +                | +                | +                | +                |
|               | NEON VFPLite                                                            | +                | +                | +                | +                | +                | +                | +                | +                |
|               | Zip Lite (boot time = ~25 seconds)                                      | Contact Logic PD | Contact Logic PD | Contact Logic PD | +                | +                | +                | Contact Logic PD | Contact Logic PD |
|               | Zip (boot time < 7 seconds)                                             | Contact Logic PD | Contact Logic PD | Contact Logic PD | Contact Logic PD | Contact Logic PD | Contact Logic PD | Contact Logic PD | Contact Logic PD |
|               | Boot                                                                    |                  |                  |                  |                  |                  |                  |                  |                  |
|               | Boot from NAND                                                          | +                | +                | +                | +                | +                | +                | +                | +                |
|               | Boot from SD                                                            | +                | +                | +                | +                | +                | +                | +                | +                |
|               | Bus Drivers                                                             |                  |                  |                  |                  |                  |                  |                  |                  |
|               | UART                                                                    | +                | +                | +                | +                | +                | +                | +                | +                |
|               | SPI                                                                     | +                | +                | +                | +                | +                | +                | +                | +                |
|               | I2C                                                                     | +                | +                | +                | +                | +                | +                | +                | +                |
|               | GPIO                                                                    | +                | +                | +                | +                | +                | +                | +                | +                |
|               | GPMC                                                                    | +                | +                | +                | +                | +                | +                | +                | +                |
|               | USB OTG Mass Storage (High Speed)                                       | +                | +                | +                | +                | +                | +                | +                | +                |
|               | USB OTG HID (High Speed)                                                | +                | +                | +                | +                | +                | +                | +                | +                |
|               | USB Host (High Speed)                                                   | +                | +                | +                | +                | +                | +                | +                | +                |
|               | USB Function                                                            | Contact Logic PD | Contact Logic PD | Contact Logic PD | +                | +                | +                | +                | +                |
|               | DMA                                                                     | Contact Logic PD | Contact Logic PD | Contact Logic PD | +                | +                | +                | +                | +                |
|               | Audio                                                                   |                  |                  |                  |                  |                  |                  |                  |                  |
|               | Stereo Audio Input                                                      | Contact Logic PD | Contact Logic PD | Contact Logic PD | +                | +                | +                | +                | +                |
|               | Stereo Audio Output                                                     | +                | +                | +                | +                | +                | +                | +                | +                |
|               | McBSP                                                                   | +                | +                | +                | +                | +                | +                | +                | +                |
|               | Video                                                                   |                  |                  |                  |                  |                  |                  |                  |                  |
|               | LCD 3.6" QVGA Display Kit (320x240, 16bpp)                              | +                | +                | +                | +                | +                | +                | +                | +                |
|               | LCD 4.3" WQVGA Display Kit (480x272, 16bpp); Sharp LQ043T1DG01 support  | +                | +                | +                | +                | +                | +                | +                | +                |
|               | LCD 4.3" WQVGA Display Kit (480x272, 16bpp) ; Sharp LQ043T1DG28 support | Contact Logic PD | Contact Logic PD | +                | Contact Logic PD | Contact Logic PD | +                | Contact Logic PD | +                |
|               | LCD 6.4" VGA Display Kit (640x480, 16bpp)                               | +                | +                | +                | +                | +                | +                | +                | +                |
|               | Backlight Control (PWM)                                                 | +                | +                | +                | +                | +                | +                | Contact Logic PD | Contact Logic PD |
|               | Touch Interface                                                         | +                | +                | +                | +                | +                | +                | +                | +                |
|               | LCD to DVI-D Adapter (VGA, SVGA, XGA, 720P)                             | +                | +                | +                | +                | +                | +                | +                | +                |
|               | HDMI (VGA, SVGA, XGA, 720P)                                             | +                | +                | +                | +                | +                | +                | +                | +                |
|               | Parallel Camera Interface                                               | Contact Logic PD | Contact Logic PD | +                | +                | +                | +                | Contact Logic PD | Contact Logic PD |
|               | Serial Camera Interface                                                 | Contact Logic PD | Contact Logic PD | Contact Logic PD | Contact Logic PD | Contact Logic PD | Contact Logic PD | Contact Logic PD | Contact Logic PD |
|               | DVSDK                                                                   | Contact Logic PD | Contact Logic PD | Contact Logic PD | +                | +                | +                | Contact Logic PD | Contact Logic PD |
|               | DSP                                                                     |                  |                  |                  |                  |                  |                  |                  |                  |
|               | DSP/BIOS or SYS/BIOS                                                    | Contact Logic PD | Contact Logic PD | Contact Logic PD | +                | +                | +                | Contact Logic PD | Contact Logic PD |
|               | DSP/Link                                                                | Contact Logic PD | Contact Logic PD | Contact Logic PD | +                | +                | +                | Contact Logic PD | Contact Logic PD |
|               | Codec Engine                                                            | Contact Logic PD | Contact Logic PD | Contact Logic PD | +                | +                | +                | Contact Logic PD | Contact Logic PD |
|               | Power VR SGX                                                            | +                | +                | +                | Contact Logic PD | Contact Logic PD | Contact Logic PD | Contact Logic PD | Contact Logic PD |
|               | Communications Interfaces                                               |                  |                  |                  |                  |                  |                  |                  |                  |
|               | 802.11a/b/g/n Wireless Ethernet                                         | +                | +                | +                | +                | +                | +                | NA               | NA               |
|               | Bluetooth 2.1+ EDR                                                      | ~                | ~                | +                | +                | +                | +                | Contact Logic PD | Contact Logic PD |
|               | GPS                                                                     | ~                | ~                | +                | ~                | ~                | +                | NA               | NA               |
|               | 802.3 Wired 10/100 Ethernet                                             | +                | +                | +                | +                | +                | +                | +                | +                |
|               | Storage                                                                 |                  |                  |                  |                  |                  |                  |                  |                  |
|               | SD Card                                                                 | +                | +                | +                | +                | +                | +                | +                | +                |
|               | Compact Flash                                                           | Contact Logic PD | Contact Logic PD | Contact Logic PD | +                | +                | +                | Contact Logic PD | Contact Logic PD |
|               | Flash File Systems                                                      |                  |                  |                  |                  |                  |                  |                  |                  |
|               | YAFFS2                                                                  | +                | +                | +                | +                | +                | +                | +                | +                |
|               | JFFS2                                                                   | Contact Logic PD | Contact Logic PD | Contact Logic PD | +                | +                | +                | Contact Logic PD | Contact Logic PD |
|               | UBIFS                                                                   | Contact Logic PD | Contact Logic PD | Contact Logic PD | Contact Logic PD | Contact Logic PD | Contact Logic PD | Contact Logic PD | Contact Logic PD |
|               | Power Management                                                        |                  |                  |                  |                  |                  |                  |                  |                  |
|               | Battery Monitor                                                         | Contact Logic PD | Contact Logic PD | Contact Logic PD | +                | +                | +                | NA               | NA               |
|               | Battery Charger Interface                                               | +                | +                | +                | +                | +                | +                | NA               | NA               |
|               | Dynamic clock speed control                                             | +                | +                | +                | +                | +                | +                | +                | +                |
|               | Power State: RUN                                                        | +                | +                | +                | +                | +                | +                | +                | +                |
|               | Power State: IDLE (reduced frequency during inactivity)                 | +                | +                | +                | +                | +                | +                | ~                | ~                |
|               | Power State: Suspend (wake on interrupt possible)                       | ~                | +                | +                | ~                | +                | +                | ~                | ~                |

|  |                                                            |                  |                  |                  |   |   |   |                  |                  |
|--|------------------------------------------------------------|------------------|------------------|------------------|---|---|---|------------------|------------------|
|  | Power State: Off Mode (processor off, RAM in self-refresh) | Contact Logic PD | Contact Logic PD | Contact Logic PD | + | + | + | Contact Logic PD | Contact Logic PD |
|  | DVFS for RUN, IDLE                                         | Contact Logic PD | Contact Logic PD | Contact Logic PD | + | + | + | +                | +                |
|  | Temp Monitor                                               | Contact Logic PD | Contact Logic PD | Contact Logic PD | + | + | + | NA               | NA               |
|  | ADC                                                        | Contact Logic PD | Contact Logic PD | Contact Logic PD | + | + | + | Contact Logic PD | Contact Logic PD |
|  | Sensors                                                    |                  |                  |                  |   |   |   |                  |                  |
|  | External Buttons                                           | +                | +                | +                | + | + | + | +                | +                |
|  | Applications                                               |                  |                  |                  |   |   |   |                  |                  |
|  | Wattson Support                                            | +                | +                | +                | + | + | + | +                | +                |
|  | Demo Application (GPIO access)                             | +                | +                | +                | + | + | + | NA               | NA               |

*\* 802.11a/b/g/n Wireless Ethernet, GPS, and Bluetooth functionality are only provided on DM/AM37x Torpedo + Wireless SOM*

## Appendix A: Software Continuation Engineering

After a Logic PD SOM product has been publicly released, Logic PD maintains that product throughout its life and manages parts obsolescence issues (and corresponding hardware and software changes) on behalf of our customers. This appendix outlines our Software Continuation Engineering process and the levels of software support and maintenance you can expect from Logic PD over the life of your product.

All new Logic PD SOM products come with one or more royalty-free BSPs (Linux, Android, Windows CE), a BSP user guide, white papers, application notes, and a software test plan and report that you can use to determine how the software was tested. It is important that you review this documentation to understand where the limitations or gaps are in order for that BSP to be adapted to your product development needs. If you find that the BSP from Logic PD is lacking, you have a number of free and paid support options available to you. Please see the [Logic PD website](#)<sup>4</sup> for more information.

To manage the frequency and scope of maintenance releases, we categorize our products into the following two groups:

- Optimization.* From the time the kit is launched and continuing for a period of 6-12 months, the software is proactively refined and optimized for power, performance, and reliability. You can expect a new release during this period of time every 3-6 months. The specifics of what is included in each maintenance release are forecasted in this document and described in detail in the release notes that accompany the BSP source code once it is released and available to you through the [Logic PD support site](#).<sup>5</sup>
- Maintenance.* From the end of the optimization phase until the SOM has been retired, the software is only changed if there is a significant issue that affects many customers or if there is a hardware change – such as when a part on the SOM goes end-of-life (EOL) – that requires a corresponding software fix. During this period of time, the BSP is no longer actively being optimized for performance and power since most of our customers have entered (or will soon be entering) production at this point.

To summarize, the following table lists all of Logic PD’s SOM products and their location in the Software Continuation Engineering lifecycle:

| Software Continuation Status | Development | Continuation |             | Description                                         |
|------------------------------|-------------|--------------|-------------|-----------------------------------------------------|
|                              |             | Optimization | Maintenance |                                                     |
| DM3730 Torpedo + Wireless    |             |              | ✓           | No future releases planned (updates made as needed) |
| DM3730 / AM3703 Torpedo SOM  |             |              | ✓           | No future releases planned (updates made as needed) |
| DM3730 / AM3703 SOM-LV       |             |              | ✓           | No future releases planned (updates made as needed) |
| OMAP35x Torpedo SOM          |             |              | ✓           | No future releases planned (updates made as needed) |
| OMAP35x SOM-LV               |             |              | ✓           | No future releases planned (updates made as needed) |
| AM35x SOM-M2**               |             |              | ✓           | No future releases planned (updates made as needed) |
| OMAP-L138 SOM-M1**           |             |              | ✓           | No future releases planned (updates made as needed) |
| AM1808 SOM-M1**              |             |              | ✓           | No future releases planned (updates made as needed) |
| PXA270 Card Engine           |             |              | ✓           | No future releases planned (updates made as needed) |
| i.MX31 SOM-LV                |             |              | ✓           | No future releases planned (updates made as needed) |
| MCF5329 Fire Engine          |             |              | ✓           | No future releases planned (updates made as needed) |
| MCF5475 Fire Engine          |             |              | ✓           | No future releases planned (updates made as needed) |
| MCF548x Fire Engine          |             |              | ✓           | No future releases planned (updates made as needed) |
| NXP LH79524 Card Engine      |             |              | ✓           | No future releases planned (updates made as needed) |
| NXP LH7A400 Card Engine      |             |              | ✓           | No future releases planned (updates made as needed) |
| NXP LH7A404 Card Engine      |             |              | ✓           | No future releases planned (updates made as needed) |
| NXP Zoom™ SDK                |             |              | ✓           | No future releases planned (updates made as needed) |
| Zoom™ ColdFire EVB           |             |              | ✓           | No future releases planned (updates made as needed) |
| Zoom™ ColdFire LITEKIT       |             |              | ✓           | No future releases planned (updates made as needed) |
| Zoom™ ColdFire SDK           |             |              | ✓           | No future releases planned (updates made as needed) |
| Zoom™ i.MX27 LITEKIT         |             |              | ✓           | No future releases planned (updates made as needed) |

**\*\* Provided by the semiconductor vendor**

If you have questions about the information provided in this appendix, please [contact Logic PD](#).<sup>6</sup>

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<sup>4</sup> <http://www.logicpd.com/support/> — Logic PD support options.  
<sup>5</sup> <http://support.logicpd.com/Home.aspx> — access to BSPs requires kit registration.  
<sup>6</sup> <http://www.logicpd.com/contact/inquiry/>