OMAP-L138 Pre-Release Processor Silicon Designation
White Paper 424

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Abstract

This White Paper explains the disclaimers associated with Texas Instruments' pre-release OMAP-L138 processor and TMX320C6748 DSP silicon. This evaluation silicon is represented by an "X" in the TI part number and, subsequently, an "X" in the Logic model numbers of SOMs and Development Kits built with pre-release silicon.

Revision History

REV	EDITOR	DESCRIPTION	APPROVAL	DATE
A	JCA	Initial release	JCA	11/16/09

1   Introduction

Texas Instruments (TI) has allowed Logic to provide pre-release OMAP-L138 processor and TMX320C6748 DSP silicon to customers purchasing evaluation System on Modules (SOMs). These SOMs will be distinguishable from full production versions by the "X" immediately preceding the processor name in the model number.

Section 2 of this document quotes TI's disclaimer associated with the XOMAPL138 and TMX320C6748 sample parts.

Section 3 of this document lists the Logic model numbers built with XOMAPL138 and TMX320C6748 sample parts.

2   TI Description of "X" Designation

The following paragraphs are from Section 7.1.2 of the TI document, *OMAP-L138 Low-Power Applications Processor* (literature number SPRS586A):

> To designate the stages in the product development cycle, TI assigns prefixes to the part numbers of all DSP devices and support tools. Each DSP commercial family member has one of three prefixes: TMX, TMP, or TMS (e.g., TMS320C6745). Texas Instruments recommends two of three possible prefix designators for its support tools: TMDX and TMDS. These prefixes represent evolutionary stages of product development from engineering prototypes (TMX/TMDX) through fully qualified production devices/tools (TMS/TMDS)
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> Device development evolutionary flow:
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> **X**   Experimental device that is not necessarily representative of the final device's electrical specifications.
>
> **P**   Final silicon die that conforms to the device's electrical specifications but has not completed quality and reliability verification.
>
> **NULL**   Fully-qualified production device.
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> Support tool development evolutionary flow:
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> **TMDX**   Development-support product that has not yet completed Texas Instruments internal qualification testing.
>
> **TMDS**   Fully qualified development-support product.
>
> TMX and TMP devices and TMDX development-support tools are shipped against the following disclaimer:
>
> "Developmental product is intended for internal evaluation purposes."
>
> TMS devices and TMDS development-support tools have been characterized fully, and the quality and reliability of the device have been demonstrated fully. TI's standard warranty applies.
>
> Predictions show that prototype devices (TMX or TMP) have a greater failure rate than the standard production devices. Texas Instruments recommends that these devices not

be used in any production system because their expected end-use failure rate still is undefined. Only qualified production devices are to be used.

3 Logic OMAP-L138 SOM Model Numbers

The following SOM configurations are built with TI evaluation XOMAPL138 processor and TMX320C6748 DSP silicon and are subject to TI's disclaimer stated above.

Model Number	Description
SOMXOMAPL138-10-1602AHCR	XOMAP-L138 processor, up to 300 MHz, 128 MB Mobile DDR, 8 MB NOR flash, wired Ethernet, touch, SATA
SOMXOMAPL138-10-1502AHCR	XOMAP-L138 processor, up to 300 MHz, 64 MB Mobile DDR, 8 MB NOR flash, wired Ethernet, touch, SATA
SOMXOMAPL138-10-1502QHCR	XOMAP-L138 processor, up to 300 MHz, 64 MB Mobile DDR, 8 MB NOR flash, wired Ethernet, touch, No SATA
SOMXC6748-10-1602AHCR	TMX320C6748 DSP, up to 300 MHz, 128 MB Mobile DDR, 8 MB NOR flash, wired Ethernet, touch, SATA