

REVISION HISTORY

Revision	ECO#	Date	Description
N/A	N/A	8-Jan-07	Draft copy for review prior to Agile Release
A	C17624	19-June-07	Release into Agile
B	C21189	12-Nov-07	Within Section 3.3 (Falcon) removed Steps 5-10 which were originally released in REV A. These steps are no longer needed to convert a retail board to a dev board. They are only needed for debug boards. In addition, Section 3.2 (Zephyr) was updated to reflect the instructions originally issued within DEV01685.
C	C26061	15-Sept-08	Added section 3.4 for Jasper Retail to Dev PCBA modifications. "To build a Jasper Dev Console PCBA, one should look at the released Jasper DEV PCBA (X819115-001 - PCBA,JASPER,DEV KIT,ICS,HYNIX MEM,512MB FLSH). For debug and testing purposes on a retail PCBA, make the following changes to emulate 99% of a real DEV PCBA"

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1 PURPOSE OR INTRODUCTION

This documents the steps it takes to build Xenon, Zephyr, and Falcon Dev Console PCBAs using released Retail BOMs for builds at the Contract Manufacturers (CMs).

2 REFERENCES

The following is a list of relevant ECOS and deviations:

Doc #	Title
DEV01615	Deviation for To build a Zephyr-A XDK PCBA using the either of the released Zephyr-A Retail BOMs
DEV01038	Deviation for To build Xenon XDK PCBA using Retail BOMs
DEV01685	ZeB PV Dev Consoles for Cert

3 INSTRUCTIONS

Prior to making any of the following changes for any of the Xbox 360 Console platforms, the MTE Team requires that a new dev BOM for the console and PCBA be created (via ECO) by copying over the selected retail PCBA and Console BOMs (which will create new part numbers) and updating the programmed flash assembly and test suites within the BOMs.

Example of an ECO (in this example the new p/ns were requested in advance of the ECO being issued via Agile doc D02652 (TEMPLATE, ITEM NUMBER REQUEST FORM)):

Copy Over BOM X811906-001 (PCBA W/HS,ZEPHYR

B,360,RETAIL,QMEM,ICS,<55WGPU,<75WCPU, FAB K) to X814013-001 (PCBAW/HS,ZEPHYR B,360,NA DEV KIT,CERT1A,QMEM,ICS,<55WGPU,<75WCPU,FAB K)

- Remove X812632-001 (PROGRAMMED ASSY,FLASH,XBOX 360,ZEPHYRB,RETAIL) and replace with X812631-001 (PROGRAMMED ASSY,FLASH,XBOX 360,ZEPHYRB,XDK DEV)
- Remove X810284-001 (ZEPHYR,TEST SUITE LIBRARY PCBA) and replace with X810575-001 (ZEPHYR, TEST SUITE LIBRARY, PCBA/XDK)

Copy BOM X813914-001 (ZEPHYR B CONSOLE ASSEMBLY,ELITE,NA,BLACK) to X814008-001 (ZEPHYR B CONSOLE ASSEMBLY,ELITE,NA,BLACK,CERT1A DEV KIT)

- Remove X810283-001 (ZEPHYR,TEST SUITE LIBRARY PRONA) and replace with X810275-001 (ZEPHYR TEST SUITE LIBRARY,DEV KIT)
- Remove X811906-001 (PCBA W/HS,ZEPHYR B,360,RETAIL,QMEM,ICS,<55WGPU,<75WCPU, FAB K) and X812026-001 (PCBA W/HS,ZEPHYR B,360,RETAIL,QMEM,ICS,<45WGPU B14L,<75WCPU,FAB K)
- Add X814013-001 (PCBAW/HS,ZEPHYR B,360,NA DEV KIT,CERT1A,QMEM,ICS,<55WGPU,<75WCPU,FAB K), QTY =1

3.1 Xenon Platform

To build a Xenon Dev Console PCBA using a released Xenon Retail BOM make the following changes:

1) Enable Debug Spew

- Stuff R1C4 with X800601-001 RES,S/M,LF,1.0KOHM,5%,1/16W,0402 (was NO-STUFF)
- Unstuff R1P2 (was X800590-001 RES,S/M,LF,10KOHM,5%,1/16W,0402)

2) Populate Lamprey Headers

- Stuff J2B1 with X804259-001 CONN,HDR,TH,LF,2X7,DUAL-ROW,VERT, PIN 14 KEYED,2.4 TAILS
- Stuff J1D2 with X804260-001 CONN,HDR,TH,LF,2X5,DUAL-ROW,VERT, PIN 10 KEYED,2.4

3) Configure for 64MB Flash

- Stuff R2D6 with X800590-001 RES,S/M,LF,10KOHM,5%,1/16W,0402
- Stuff U2E1 with X802184-001 IC,S/M,MEM,LF,NAND,64MX8,TSOP48,SAMSUNG B-DIE
- Unstuff R2D5 with X800590-001 RES,S/M,LF,10KOHM,5%,1/16W,0402

4) CheckStop LED

- Stuff R8B6 with X800427-001 RES,S/M,LF,2KOHM,1%,1/16W,0402
- Stuff R8A5 with X800601-001 RES,S/M,LF,1.0KOHM,5%,1/16W,0402
- Stuff Q8B6 with X801037-001 BJT,S/M,LF,NPN,SWITCH,2N2222,SOT23
- Stuff D8B4 with X801078-001 LED,LF,GREEN,QTLP601C-AG,0603

5) When building into a console, stuff the following Lamprey cables following standard installation procedures:

- X801796-001 CABLE ASSEMBLY, MOBO, LAMPREY, SMC KERNEL DEBUG PORT
- X801797-001 CABLE ASSEMBLY, MOBO, LAMPREY, SPI PORT

6) Reset the console type from Retail to Dev (Agile doc H03710)

RETAIL 00000002

DEVELOPMENT 00000001

3.2 Zephyr Platform

To build a Zephyr Dev Console PCBA using a released Zephyr Retail BOM, make the following changes:

1) Enable Debug Spew

- Stuff R1C4 with X800601-001 RES,S/M,LF,1.0KOHM,5%,1/16W,0402 (was NO-STUFF)
- Unstuff R1P2 (was X800590-001 RES,S/M,LF,10KOHM,5%,1/16W,0402)

2) Populate Lamprey Headers

- Stuff J2B1 with X804259-001 CONN,HDR,TH,LF,2X7,DUAL-ROW,VERT, PIN 14 KEYED,2.4 TAILS
- Stuff J1D2 with X804260-001 CONN,HDR,TH,LF,2X5,DUAL-ROW,VERT, PIN 10 KEYED,2.4

3) Configure for 64MB Flash

- Stuff R2D6 with X800590-001 RES,S/M,LF,10KOHM,5%,1/16W,0402
- Stuff U2E1 with X802184-001 IC,S/M,MEM,LF,NAND,64MX8,TSOP48,SAMSUNG B-DIE
- Unstuff R2D5 with X800590-001 RES,S/M,LF,10KOHM,5%,1/16W,0402

4) CheckStop LED

- Stuff R8B6 with X800427-001 RES,S/M,LF,2KOHM,1%,1/16W,0402
- Stuff R8A5 with X800601-001 RES,S/M,LF,1.0KOHM,5%,1/16W,0402

- Stuff Q8B6 with X801037-001 BJT,S/M,LF,NPN,SWITCH,2N2222,SOT23
- Stuff D8B4 with X801078-001 LED,LF,GREEN,QTLP601C-AG,0603

5) When building into a console, stuff the following Lamprey cables following standard installation procedures:

- X801796-001 CABLE ASSEMBLY, MOBO, LAMPREY, SMC KERNEL DEBUG PORT
- X801797-001 CABLE ASSEMBLY, MOBO, LAMPREY, SPI PORT

6) Reset the console type from Retail to Dev (Agile doc H03710)

RETAIL 00000002

DEVELOPMENT 00000001

3.3 Falcon Platform

To build a Falcon Dev Console PCBA using a released Falcon Retail BOM, make the following changes:

1) Enable Debug Spew

- Stuff R1C4 with X800601-001 RES,S/M,LF,1.0KOHM,5%,1/16W,0402 (was NO-STUFF)
- Unstuff R1P2 (was X800590-001 RES,S/M,LF,10KOHM,5%,1/16W,0402)

2) Populate Lamprey Headers

- Stuff J2B1 with X804259-001 CONN,HDR,TH,LF,2X7,DUAL-ROW,VERT, PIN 14 KEYED,2.4 TAILS
- Stuff J1D2 with X804260-001 CONN,HDR,TH,LF,2X5,DUAL-ROW,VERT, PIN 10 KEYED,2.4

3) Configure for 64MB Flash

- Stuff R2D6 with X800590-001 RES,S/M,LF,10KOHM,5%,1/16W,0402
- Stuff U2E1 with X802184-001 IC,S/M,MEM,LF,NAND,64MX8,TSOP48,SAMSUNG B-DIE
- Unstuff R2D5 with X800590-001 RES,S/M,LF,10KOHM,5%,1/16W,0402

4) CheckStop LED

- Stuff R8B6 with X800427-001 RES,S/M,LF,2KOHM,1%,1/16W,0402
- Stuff R8A5 with X800601-001 RES,S/M,LF,1.0KOHM,5%,1/16W,0402
- Stuff Q8B6 with X801037-001 BJT,S/M,LF,NPN,SWITCH,2N2222,SOT23
- Stuff D8B4 with X801078-001 LED,LF,GREEN,QTLP601C-AG,0603

5) When building into a console, stuff the following Lamprey cables following standard installation procedures:

- X801796-001 CABLE ASSEMBLY, MOBO, LAMPREY, SMC KERNEL DEBUG PORT

- X801797-001 CABLE ASSEMBLY, MOBO, LAMPREY, SPI PORT

6) Reset the console type from Retail to Dev (Agile doc H03710)

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3.4 Jasper Platform

To build a Jasper Dev Console PCBA, one should look at the released Jasper DEV PCBA (X819115-001 - PCBA,JASPER,DEV KIT,ICS,HYNIX MEM,512MB FLSH). For debug and testing purposes on a retail PCBA, make the following changes to emulate 99% of a real DEV PCBA:

1) Enable Debug Spew

- Stuff R1C4 with X800601-001 RES,S/M,LF,1.0KOHM,5%,1/16W,0402 (was NO-STUFF)
- Unstuff R1P2 (was X800590-001 RES,S/M,LF,10KOHM,5%,1/16W,0402)

2) Populate Lamprey Headers

- Stuff J2B1 with X804259-001 CONN,HDR,TH,LF,2X7,DUAL-ROW,VERT, PIN 14 KEYED,2.4 TAILS
- Stuff J1D2 with X804260-001 CONN,HDR,TH,LF,2X5,DUAL-ROW,VERT, PIN 10 KEYED,2.4

3) Configure for 256MB Flash if PCBA is **not ARCADE SKU** (no need flash modification for ARCADE SKU)

- Stuff R2D6 with X800590-001 RES,S/M,LF,10KOHM,5%,1/16W,0402
- Stuff U2E1 with X809112-002 IC,S/M,LF,FLASH MEMORY,256MX8,K9F2G08U0A-P,TSOP-48 or X817006-001 IC,S/M,LF,FLASH MEMORY,256MX8,HY27UF082G2B,(57NM),TSOP-48
- Unstuff R2D5 with X800590-001 RES,S/M,LF,10KOHM,5%,1/16W,0402
- Unstuff R2D7 with X800590-001 RES,S/M,LF,10KOHM,5%,1/16W,0402
- Stuff R2D8 with X800590-001 RES,S/M,LF,10KOHM,5%,1/16W,0402

4) CheckStop LED

- Stuff R8B6 with X800427-001 RES,S/M,LF,2KOHM,1%,1/16W,0402
- Stuff R8A5 with X800601-001 RES,S/M,LF,1.0KOHM,5%,1/16W,0402
- Stuff Q8B6 with X801037-001 BJT,S/M,LF,NPN,SWITCH,2N2222,SOT23
- Stuff D8B4 with X801078-001 LED,LF,GREEN,QTLP601C-AG,0603

5) When building into a console, stuff the following Lamprey cables following standard installation procedures:

- X801796-001 CABLE ASSEMBLY, MOBO, LAMPREY, SMC KERNEL DEBUG PORT
- X801797-001 CABLE ASSEMBLY, MOBO, LAMPREY, SPI PORT

6) Reset the console type from Retail to Dev (Agile doc H03710)

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