

Date: March
Revision:

EMIF Tools: Register Conf

Direct

- 1) Save the user configuration from the '*Title-README*' worksheet. Values will be auto
OR
Copy and paste the following text into corresponding u-boot source files.

```
/* =====  
 * Copyright (C) 2017 Texas Instruments Incorporated  
 *  
 * All rights reserved. Property of Texas Instruments Incorporated.  
 * Restricted rights to use, duplicate or disclose this code are  
 * granted through contract.  
 *  
 * The program may not be used without the written permission  
 * of Texas Instruments Incorporated or against the terms and condition  
 * stipulated in the agreement under which this program has been  
 * supplied.  
 * =====  
  
/*  
 * AM571x_DDR3L_532MHz_TI_EVM_revH_config.c  
 * Created on: 06/27/2018  
 * Created with: EMIF_RegisterConfig_v2.0.1  
 */  
  
#include "emif4d5_wrapper.h"  
  
const struct dpll_params AM571x_DDR3L_532MHz_TI_EVM_revH_pll_pa  
    .m = 266,  
    .n = 4,  
    .m2 = 2,  
    .m4_h11 = 8  
};  
  
const struct ctrl_ioregs AM571x_DDR3L_532MHz_TI_EVM_revH_ctrl_ior  
    .ctrl_ddr3ch = 0x60606060,  
    .ctrl_ddrch = 0x40404040,  
    .ctrl_ddrio_0 = 0x00094A40,  
    .ctrl_ddrio_1 = 0x00000000,  
    .ctrl_emif_sdram_config_ext = 0x0000C123  
};  
  
const struct dmm_lisa_map_regs AM571x_DDR3L_532MHz_TI_EVM_rev  
    .dmm_lisa_map_0 = 0x00000000,  
    .dmm_lisa_map_1 = 0x00000000,  
    .dmm_lisa_map_2 = 0x80700100,  
    .dmm_lisa_map_3 = 0xFF020100,  
    .is_ma_present = 0x1
```

```

};

const struct emif_regs AM571x_DDR3L_532MHz_TI_EVM_revH_emif_regs
{
    .sdram_config_init = 0x61851BB2,
    .sdram_config = 0x61851BB2,
    .sdram_config2 = 0x00000000,
    .ref_ctrl = 0x000040F1,
    .ref_ctrl_final = 0x00001035,
    .sdram_tim1 = 0xCCCCF36B3,
    .sdram_tim2 = 0x30BF7FDA,
    .sdram_tim3 = 0x407F8BA8,
    .read_idle_ctrl = 0x00050000,
    .zq_config = 0x5007190B,
    .temp_alert_config = 0x00000000,
    .emif_rd_wr_lvl_rmp_ctl = 0x80000000,
    .emif_rd_wr_lvl_ctl = 0x00000000,
    .emif_ddr_phy_ctrl_1_init = 0x0824400B,
    .emif_ddr_phy_ctrl_1 = 0x0E24400B,
    .emif_rd_wr_exec_thresh = 0x00000305
};

/*
 * DLL Ratio Values are an estimate based on trace lengths. Either
 * software leveling or hardware leveling should be performed to
 * determine final DLL values.
 */

const unsigned int AM571x_DDR3L_532MHz_TI_EVM_revH_emif1_ext_params[] =
{
    0x04040100, // EMIF1_EXT_PHY_CTRL_1
    0x006B00A2, // EMIF1_EXT_PHY_CTRL_2
    0x006B00A2, // EMIF1_EXT_PHY_CTRL_3
    0x006B00A6, // EMIF1_EXT_PHY_CTRL_4
    0x006B00A6, // EMIF1_EXT_PHY_CTRL_5
    0x006B00AA, // EMIF1_EXT_PHY_CTRL_6
    0x002F002F, // EMIF1_EXT_PHY_CTRL_7
    0x002F002F, // EMIF1_EXT_PHY_CTRL_8
    0x002F002F, // EMIF1_EXT_PHY_CTRL_9
    0x002F002F, // EMIF1_EXT_PHY_CTRL_10
    0x002F002F, // EMIF1_EXT_PHY_CTRL_11
    0x0060006F, // EMIF1_EXT_PHY_CTRL_12
    0x00600070, // EMIF1_EXT_PHY_CTRL_13
    0x00600079, // EMIF1_EXT_PHY_CTRL_14
    0x00600079, // EMIF1_EXT_PHY_CTRL_15
    0x00600083, // EMIF1_EXT_PHY_CTRL_16
    0x0040004F, // EMIF1_EXT_PHY_CTRL_17
    0x00400050, // EMIF1_EXT_PHY_CTRL_18
    0x00400059, // EMIF1_EXT_PHY_CTRL_19
    0x00400059, // EMIF1_EXT_PHY_CTRL_20
    0x00400063, // EMIF1_EXT_PHY_CTRL_21
    0x00800080, // EMIF1_EXT_PHY_CTRL_22
    0x00800080, // EMIF1_EXT_PHY_CTRL_23
    0x40010080, // EMIF1_EXT_PHY_CTRL_24
    0x08102040, // EMIF1_EXT_PHY_CTRL_25
    0x005B0092, // EMIF1_EXT_PHY_CTRL_26
    0x005B0092, // EMIF1_EXT_PHY_CTRL_27
    0x005B0096, // EMIF1_EXT_PHY_CTRL_28

```

```
0x005B0096,      // EMIF1_EXT_PHY_CTRL_29
0x005B009A,      // EMIF1_EXT_PHY_CTRL_30
0x0030003F,      // EMIF1_EXT_PHY_CTRL_31
0x00300040,      // EMIF1_EXT_PHY_CTRL_32
0x00300049,      // EMIF1_EXT_PHY_CTRL_33
0x00300049,      // EMIF1_EXT_PHY_CTRL_34
0x00300053,      // EMIF1_EXT_PHY_CTRL_35
0x00000077      // EMIF1_EXT_PHY_CTRL_36
};
```

```
struct emif_cfg AM571x_DDR3L_532MHz_TI_EVM_revH = {
    .platform = "AM571x_DDR3L_532MHz_TI_EVM_revH",
    .EMIF2_DEFINED = 0,
    .pll_regs = &AM571x_DDR3L_532MHz_TI_EVM_revH_pll_params,
    .ctrl_regs = &AM571x_DDR3L_532MHz_TI_EVM_revH_ctrl_ioregs,
    .dmm_regs = &AM571x_DDR3L_532MHz_TI_EVM_revH_dmm_regs,
```

```
.regs = &AM571x_DDR3L_532MHz_TI_EVM_revH_emif_regs,  
.phy_regs1 = AM571x_DDR3L_532MHz_TI_EVM_revH_emif1_ext_phy_re  
  
.ecc_ctrl = 00000000,  
.ecc_addr1 = 00000000,  
.ecc_addr2 = 00000000,  
};
```

h 29th, 2018
n: 2.0.1

figuration - Register Values

itions

matically populated in accompanying software.

=====

1S

===== */

rams = {

egs = {

H_dmm_regs = {

js = {

why_regs [] = {

gs,



