NOTE:
Freescale has validated two different sets of decoupling capacitors and board layouts for use with the i.MX 6 processors. The customer is free to choose the desired decoupling scheme. This scheme uses fewer components. The alternate scheme can be found on the ARD board. Refer to SCH-27142 and LAY-27142.

Extra Bulk Capacitors

NOTE:
In early design of the Smart Device board, these bulk capacitors were used. Later versions of the board, it was found that these capacitors should be removed with no effect. This reduces the capacitance loading on the internal processors 10% - 15%. Components/Options that have been added in place of the above capacitors do not provide the same performance as the capacitors removed. The capacitor loading on the internal processor(s) will be increased by the same percentage.

SH503
SOLDER SHORT
DNP
SOLDER SHORT

NOTE: To configure SD board to run in Secure HDMI mode:
1) Depopulate R153 and R154 (schematic page 22)
This removes HDMI pins used by 68K.
2) Depopulate R153 and R154 (schematic page 22)
This removes HDMI pins used by 68K.
3) Depopulate R153 and R154 (schematic page 22)
This removes HDMI pins used by 68K.
4) Depopulate R153 and R154 (schematic page 22)
This removes HDMI pins used by 68K.
5) R167 may be left populated or depopulated as desired.
8GB eMMC MEMORY

4MB SPI NOR FLASH

Layout:
50ohm, SD signals(SD_DATAx, SD_CMD, SD_CLK) control.
**SD CARD SOCKET**

Layout:
50ohm, SD signals(SD_DATAx, SD_CMD, SD_CLK) length equal

**SATA CONNECTOR**

**NOTE:**
The new SATA specification retires the 3V3 pins as they were not being used by regular sized SATA devices.
Pin 3 was repurposed to a device sleep functionality available in next generation SATA devices.
Latest specification also recommends tying Pins 1 and 2 together, but leave floating.

1. 100ohm diff pairs, length equal
2. Mount these capacitors very close to the connector J506.

**hard drive standoff**

*Note: The SATA interface on the i.MX6 DualLite Processor is disabled. These parts have been populated only to provide continuity with other Smart Devices that use the same PCB, and simplify manufacturing both MCIMX6Q-SDP and MCIMX6DL-SDP boards on the same manufacturing line.*
NOTE:
When using HDMI, I2C2 bus is limited to 100 kHz to read EDID values due to HDMI standards.
I2C2 bus speed should be limited to 100 kHz whenever Hot Plug Detect is high.

LVDS Connector notes:
Pin 1: This pin is the Display Enable pin. It is used to Enable/Disable the HannStar display.
Pin 5: This pin is the Display Brightness control. It provides a PWM signal to the display to increase/decrease display brightness depending on PWM duty cycle. This signal is shared by all displays, so all displays will change brightness together.
CSI CMOS Sensor
OV5642 5M Pixel

Place R225 close to connector J9 in the event a reflected signal from camera needs to be suppressed.

NOTE:
The Camera Analog Power supply has been moved to VGEN3. Freescale SW will program VGEN3 to operate at 2.8V. L25 and L26 are now populated and L10 and L17 are depopulated. See the Freescale HW User Guide for the Smart Device board for details (to be published 4Q12).

Layout: 100 ohm differential pairs
DISP0 Expansion Connector

For MX60 EPD

Touch Panel decoder, Analog to Digital converter.

ICAP Classification: FCP: FIUO: PUBI:

Drawing Title:
MCIMX6DL-SMART DEVICE PLATFORM
Page Title:
EPDC EXP PORTS

SOURCE:SCH-27417 PDF:SPF-27417 C3
Date: Sheet
Tuesday, February 19, 2013
NOTE:
On Rev B4 boards, buffers U500 and U520 are removed, and a wire is added by hand connecting pins 2 and 4 together. On Rev C boards, the layout will be modified to remove the hand rework.

NOTE:
MECHPAD trace is for mechanical hold down tabs only. There is no shield ground on this plastic connector.
Notes:
1. R103 populated in A position to prevent USB_5V path to battery charge ICs when no batteries are attached.
To enable charging batteries from USB, move resistor from Position A to Position B.

Truth Table

<table>
<thead>
<tr>
<th>OTG VBUS</th>
<th>PWR_EN</th>
<th>CHG</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOW</td>
<td>HIGH</td>
<td>LOW</td>
</tr>
<tr>
<td>HIGH</td>
<td>LOW</td>
<td>POWERED</td>
</tr>
</tbody>
</table>

Note:
On all three pad resistor options, resistors are to be initially populated on pads 1 - 2 (Option A). Users may move resistors from their default locations as needed.

NOTE:
Due to placement requirements on the SABRE SD board set, layout routing for the USB_OTG_DP and USB_OTG_DP traces are sub-optimal. It is recommended that customers consider using the USB layout on the Freescale I.MX6 SABRE AI board as a better example of proper USB trace routing.
**AUX SDIO CARD SOCKET**

Layout:
50ohm, SD signals (SD_DATAx, SD_CMD, SD_CLK) length equal

**BLUETOOTH CABLE CONNECTOR**

Notes:
- To use J13, populate resistors R209 - R213 and depopulate the SPI NOR FLASH U14. Resistors R214 and R215 should not be populated because both UART outputs (RXD) have been crossed together and both UART inputs (TXD) have been crossed together. To make the UART work correctly, solder a jumper wire from R215 pad 1 to R224 pad 2 and from R215 pad 2 to R214 pad 1.
- Pin 1 of the cable connector on the Smart Device board is opposite Pin 20 of the WIFI/BT module. For the FFC to lie flat, the pin order number needs to be reversed on the schematics.
- J13 has been provided for testing the Bluetooth functionality of the SX-SDCAN-2830BT module. This part of the circuit has not yet been tested, which is why the initial boards are being shipped with isolation resistors R209 - R215 depopulated. Until fully tested, the developer assumes responsibility for enabling J13 for testing purposes. See the Freescale HW User Guide for the Smart Device board for details (to be published 4Q12).

**OPTIONAL CAN PINOUT**

NOTE:
- The AUX SDIO CARD SOCKET and the BLUETOOTH CABLE CONNECTOR have been designed and tested specifically for use with the WIFI/BT combo card SX-SDCAN-2830BT.
- Developed and sold by Silex Technology. The developer may need to consult the datasheet of other WIFI solutions for compatibility with this card socket.

NOTE:
- Pin 1 of the cable connector on the Smart Device board is opposite Pin 20 of the WIFI/BT module. For the FFC to lie flat, the pin order number needs to be reversed on the schematics.
Mini-PCIE

**Layout:** 100 ohm differential pairs

- Place near CON
- Place parallel termination resistors R6 and R8 as close to the mPCIe connector J1 as possible.

**NOTE:**
This design assumes a normal loading on the MPCIE_3V3 rail of up to 1A. PF0100 SW2 can supply a maximum of 2A current. If more than 1A loading is desired, the designer must consider other load on the GEN_3V3 rail and depopulate other loads to allow additional loading on the MPCIE_3V3 rail. The MPCIE_1V5 rail is allowed a maximum of 100 mA.
OVER VOLTAGE PROTECTION

OPTION 1

BATTERY 1
CHARGE CIRCUIT

BATTERY 2
CHARGE CIRCUIT

OPTION 2

NOTE:
Battery posts are meant for two, single cell 3.7 Li-ION batteries to be added in parallel.

Note: Populate either
Option #1 for the Smart Device Board, or
Option #2 for the Smart Device Platform
Typical Power Requirements

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Rail Name</th>
<th>Block</th>
<th>Generated By</th>
<th>Current Drawn</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.0</td>
<td>PMIC_5V</td>
<td></td>
<td>PMIC_HV</td>
<td>600</td>
<td></td>
</tr>
<tr>
<td>5.0</td>
<td>PMIC_5V</td>
<td></td>
<td>PMIC_HV</td>
<td>1000</td>
<td></td>
</tr>
<tr>
<td>1.3</td>
<td>GEN_3V3</td>
<td></td>
<td>PMIC_3V</td>
<td>2000</td>
<td></td>
</tr>
<tr>
<td>3.3</td>
<td>AUX_3V15</td>
<td></td>
<td>PMIC_3V</td>
<td>1000</td>
<td></td>
</tr>
<tr>
<td>1.8</td>
<td>GEN_3V1</td>
<td></td>
<td>PMIC_3V</td>
<td>1000</td>
<td></td>
</tr>
<tr>
<td>1.8</td>
<td>GEN_3V1</td>
<td></td>
<td>PMIC_3V</td>
<td>350</td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td>GEN_3V1</td>
<td></td>
<td>PMIC_3V</td>
<td>250</td>
<td></td>
</tr>
<tr>
<td>3.3</td>
<td>GEN_3V3</td>
<td></td>
<td>PMIC_3V</td>
<td>1000</td>
<td></td>
</tr>
<tr>
<td>1.8</td>
<td>GEN_3V1</td>
<td></td>
<td>PMIC_3V</td>
<td>1000</td>
<td></td>
</tr>
<tr>
<td>3.3</td>
<td>GEN_3V3</td>
<td></td>
<td>PMIC_3V</td>
<td>1000</td>
<td></td>
</tr>
</tbody>
</table>

Note: Bulk capacitors on VGEN1-6 are all 4.7uF for BOM consolidation purposes. Freescale recommended guidance for minimum capacitance on VGEN1, VGEN3, VGEN5, VGEN6 is 2.2uF.

- PMIC_SDA22 Drawing Title: ICAP Classification: FCP: FIUO: PUBI: ___ X___
- PMIC_SCL22 Drawing Title: ICAP Classification: FCP: FIUO: PUBI: ___ X___

Note: PMIC_5V power. The circuit has not yet been tested. See the Freescale PM IC User Guide for the Smart Device board for details (to be published 4Q12).

System Power Rails

- USB
- HDMI
- SATA
- LVDS
- DDR
- PMIC
- PMIC
- CMIC
- CAM
- CPU
- DDR
- PMIC
- PMIC
- PMIC

Note: PMIC_Power On Circuit

Note: To turn off board "AUTO ON" feature, de-populate R30 and R31, and populate U509. This feature has not yet been tested. See the Freescale PM IC User Guide for the Smart Device board for details (to be published 4Q12).

Note: R32 is provided for testing an alternate gating source for PMIC_5V power. The circuit has not yet been tested. See the Freescale PM IC User Guide for the Smart Device board for details (to be published 4Q12).

Note: PMIC_5V power. The circuit has not yet been tested. See the Freescale PM IC User Guide for the Smart Device board for details (to be published 4Q12).

Note: MMPF0100 Pass1.0 through Pass1.2 are subject to boot issues if power is removed from the board and reapplied within ~2 minutes. PMPPF0100 Pass2.0 will correct this issue. For more details, see the PMPPF0100 Errata, Issue #ER19.
Optional LDO

3.0V@300mA max

U9 is no longer required for FF0100 VSNVS issue, but may be desired for NVCC_PLL_VOUT. It is being left in a depopulated condition. If the LDO is needed, R34 and R35 should be populated as follows:
For VSNVS (3.0V): R34 = 47K, R35 = 309K
For NVCC_PLL_OUT (1.1V): R34 = 47K, R35 = 82.5K

5.0V@1A DC2DC

NOTE FOR VDDHIGH_IN LOADING ON VGEN5:
VDDHIGH was placed on VGEN5 early in the design as a compromise solution for a board designed primarily for software development. Validation of the i.MX processor has shown that operations at elevated temperatures may cause VDDHIGH_IN to require much more current than VGEN5 can supply. It is recommended for robust designs potentially operating at more extreme temperatures for VDDHIGH to be supplied from a power rail that can supply 250 mA or more. This allows for datasheet maximum of 125 mA for internal VDDHIGH_IN loads plus 125 mA for external PHY IO loads.

The optional LDO U9 shown on this page could be reconfigured to supply both VDDHIGH_IN and VDD_SNVS_IN loads to meet the additional current requirements.

U9: LTC3025 DNP
BIAS1
IN3
OUT 4
ADJ 5
SHDN 6

R540
1000%

U6 MAX8815AETB+

LX1 1
LX2 2
BATT3
ON4

GND5
FB 6
OUTS 7

SKIPB8
POUT1 9
POUT2 10

EP 11

SH1 SOLDER SHORT

R34
47K5%
DNP

R35
309K1%
DNP

C9
0.1UF16V

C53
0.1UF
16V

C8
22UF6.3V

C10
10UF
6.3V

R4
0
DNP

C32
10uF
10V
DNP

L1
1.2uH

C33
10uF
10V
DNP

L2
2.2uH

C34
22uF
10V
DNP

C35
100UF
10V
DNP

R598
0
DNP

C52
0.1UF
6.3V

C11
10UF
6.3V
DNP

R7
4.7K
DNP

AUX VOLT REG

MCIMX6DL-SMART DEVICE PLATFORM

C0
NOTE:
On Rev B4 and later designs, the RESET button is connected directly to the PWRON input of the PMIC. This will cause a complete board reset (Processor & PMIC) when the RESET button is pressed.

NOTE:
Place series resistors so as to minimize EIM portion of trace length. Two layout possibilities include:
1) As close to processor as possible.
2) Close to other components using EIM signals.

---

**Boot Configuration Select**

![Boot Configuration Diagram]

**Boot Select Table**

<table>
<thead>
<tr>
<th>Boot Mode</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD/eSD Boot</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>SD3 Boot</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>SD2 Boot</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>SATA Boot</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

**Boot Modes:**
00 Boot from fuses
01 Serial downloader
10 Boot from board settings
11 Reserved
NOTE:
R183 and R189 were changed to bring I2C rise time from LOW >> HIGH within electric specification. If using a CODEC other than the one used in this design, it may be possible to switch pull up resistors back to 4.7K.

NOTE:
On all three pad resistor options, resistors are to be initially populated on pads 1 - 2 (Option A). Users may move resistors from their default locations as needed.
**Build Option:**

**MCIMX6Q-SDB**

- 1. CAN Output not populated: J10
- 3. SPI NOR Flash not populated: C83, R149, R643, R646, U14
- 5. Audio Block Components not populated: C1, C128, C558, R569, R573, US01, US10, US21
- 6. EPDC Port Connector not populated: J508
- 7. Ambient Light Sensor not populated: C108, R184, R185, R188, R190, R191, U17
- 8. GPS Module not populated: C111, C118, C764, C765, J12, L22, L23, Q516, Q517, Q518, Q519, R188, R192, R194, R664, R668, R669, R671, R672, R673, U19

**Build Option:**

**MCIMX6Q-SDP**

**MCIMX6DL-SDP**

- 1. CAN Output not populated: J10
- 2. OverVoltage Protection circuit not populated: (OverVoltage Protection provided by battery charge ICs) D5, D500, D501, D502, D503, J501, Q1, Q6, Q503, R1, R2, R3, R303, R500, R505, R520, R524, SW3
- 3. Extra Bulk Capacitors not populated: C39, C54, C68, C606, C607, C608, C609, C610, C611, C612, C673, C681
### PIN MUX TABLES

#### I2C1 Bus (1.8V)

<table>
<thead>
<tr>
<th>Peripheral</th>
<th>Bus Activity Level</th>
<th>Speed (kbps)</th>
<th>Addresses (hex)</th>
<th>Default Address (hex)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSI Bus Camera</td>
<td>Low</td>
<td>400</td>
<td>Write: 0x78</td>
<td>Write: 0x78</td>
</tr>
<tr>
<td>Audio CODEC</td>
<td>Low</td>
<td>400</td>
<td>0x34, 0x36</td>
<td>0x34</td>
</tr>
<tr>
<td>MMA 8451Q Accelerometer</td>
<td>Low</td>
<td>400</td>
<td>0x3A, 0x39</td>
<td>0x39</td>
</tr>
<tr>
<td>I2C1_SCL = CS10_DAT8</td>
<td>Low</td>
<td>400</td>
<td>0x68, 0x69</td>
<td>0x68, 0x69</td>
</tr>
</tbody>
</table>

#### I2C2 Bus (3.3V)

<table>
<thead>
<tr>
<th>Peripheral</th>
<th>Bus Activity Level</th>
<th>Speed (kbps)</th>
<th>Addresses (hex)</th>
<th>Default Address (hex)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PF0100 PMIC</td>
<td>Low</td>
<td>400</td>
<td>0x80, 0x00</td>
<td>0x80</td>
</tr>
<tr>
<td>MIPI Bus Camera</td>
<td>Low</td>
<td>400</td>
<td>0x3C</td>
<td>0x3C</td>
</tr>
<tr>
<td>MIPI Bus Display</td>
<td>Low</td>
<td>400</td>
<td>0x50</td>
<td>0x50</td>
</tr>
<tr>
<td>LVDS0 EDID</td>
<td>Low</td>
<td>400</td>
<td>0x82</td>
<td>0x82</td>
</tr>
<tr>
<td>LCD TOUCH SCREEN</td>
<td>Low</td>
<td>400</td>
<td>0x6B, 0x6C, 0x6D</td>
<td>0x6B, 0x6C, 0x6D</td>
</tr>
</tbody>
</table>

#### I2C3 Bus (3.3V)

<table>
<thead>
<tr>
<th>Peripheral</th>
<th>Bus Activity Level</th>
<th>Speed (kbps)</th>
<th>Addresses (hex)</th>
<th>Default Address (hex)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LVDS1 EDID</td>
<td>Low</td>
<td>100</td>
<td>0x50</td>
<td>0x50</td>
</tr>
<tr>
<td>LVDS1 TOUCH SCREEN</td>
<td>High</td>
<td>400</td>
<td>0x82</td>
<td>0x82</td>
</tr>
<tr>
<td>PCIe EXP PORT</td>
<td>Low</td>
<td>400</td>
<td>0x68, 0x69, 0x6A, 0x6B</td>
<td>0x68, 0x69, 0x6A, 0x6B</td>
</tr>
<tr>
<td>AMBIENT LIGHT SENSOR</td>
<td>Low</td>
<td>400</td>
<td>0x44</td>
<td>0x44</td>
</tr>
<tr>
<td>DIGITAL eCompass</td>
<td>Low</td>
<td>400</td>
<td>0x0E</td>
<td>0x0E</td>
</tr>
</tbody>
</table>

### Reserved For I.MX6DLS

<table>
<thead>
<tr>
<th>Ball Name</th>
<th>Ball Number</th>
<th>IOMUX Use</th>
<th>GPIO Function</th>
<th>Direction</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSIO_DAT10</td>
<td>M1</td>
<td>ALT9</td>
<td>SDIO_DATA</td>
<td>input</td>
<td>high</td>
</tr>
<tr>
<td>CSIO_DAT11</td>
<td>M9</td>
<td>ALT9</td>
<td>SDIO_DATA</td>
<td>input</td>
<td>high</td>
</tr>
<tr>
<td>CSIO_DAT12</td>
<td>L1</td>
<td>ALT9</td>
<td>SDIO_DATA</td>
<td>input</td>
<td>high</td>
</tr>
<tr>
<td>CSIO_DAT13</td>
<td>L9</td>
<td>ALT9</td>
<td>SDIO_DATA</td>
<td>input</td>
<td>high</td>
</tr>
<tr>
<td>CSIO_DAT14</td>
<td>M4</td>
<td>ALT9</td>
<td>SDIO_DATA</td>
<td>input</td>
<td>high</td>
</tr>
<tr>
<td>CSIO_DAT15</td>
<td>M2</td>
<td>ALT9</td>
<td>SDIO_DATA</td>
<td>input</td>
<td>high</td>
</tr>
<tr>
<td>CSIO_DAT16</td>
<td>G4</td>
<td>ALT9</td>
<td>SDIO_DATA</td>
<td>input</td>
<td>high</td>
</tr>
<tr>
<td>CSIO_DAT17</td>
<td>L3</td>
<td>ALT9</td>
<td>SDIO_DATA</td>
<td>input</td>
<td>high</td>
</tr>
<tr>
<td>CSIO_DAT18</td>
<td>G3</td>
<td>ALT9</td>
<td>SDIO_DATA</td>
<td>input</td>
<td>high</td>
</tr>
<tr>
<td>CSIO_DAT19</td>
<td>L6</td>
<td>ALT9</td>
<td>SDIO_DATA</td>
<td>input</td>
<td>high</td>
</tr>
<tr>
<td>CSIO_DAT20</td>
<td>G6</td>
<td>ALT9</td>
<td>SDIO_DATA</td>
<td>input</td>
<td>high</td>
</tr>
</tbody>
</table>

### MCIMX6DL-SMART DEVICE PLATFORM PIN MUX TABLE

**SOURCE:** SCH-27417 PDF:SPF-27417 C3

**MCIMX6DL-SMART DEVICE PLATFORM**

**Sheet**: C3

**Date**: Tuesday, February 19, 2013
HISTORY OF TEMPORARY DEVIATIONS

TDA 4100
1. Digital microphone ANALOG DEVICES ADMP421 was used in place of WOLFSON WM8730 due to supply shortage. Affects U500 and U520.

TDA 4112
Replaced TDA 4100
1. Digital microphone ANALOG DEVICES ADMP421 was used in place of WOLFSON WM8730 due to supply shortage. Affects U500 and U520.
2. Q512 was depopulated due to schematic mistake. Removes battery charge from U5N option.
3. Depopulate R30 on NCMX6DL-SDP boards only. 
4. X866L Processor configured for Smart PMIC mode. Not compatible with board design. Removes SW ability to shutdown the board.

TDA 4136
1. Solder a 0402 2.2M Ohm resistor across pins of C55. Some i.MX6Q Processors require this resistor to stabilize the 24MHz crystal circuit, in order to start up within the required time interval.

TDA 4221 (6DL) / TDA 4222 (6Q)
1. Schematic revision B3 changed DDK3 memory to NXPX128M16J3-125KX. Due to unavailability of new part, this TD makes the continued use of NXPX128M16J3-125KX.
2. Change R440 to 1.0uF capacitor.
3. Change resistors R183 and R189 to 2.37k Ohm resistors.

TDA 4275
1. Remove buffers U500 and U520 from digital microphone data signal. Replace with hand wire mod.
2. Add WDOG_B reset capability (Q11, R32, C31).
3. Add diode D11 to EIM_D13 to allow GPIO sense of power button press.
4. Change RESET button press to connect to PMIC PWREN pin. RESET press now causes global reset.
5. Add 1kF pull down resistor R33 to SDCKE0 pin. 
6. Depopulate Resistors R174 and R176 to disconnect LVDS0 LED1 from I2C communications channel.
7. Populate Battery Connector Header CON3.
9. Remove U1 from BOM (in preparation for next revision MX 6 silicon).
10. On NCMX6DL-SDP boards, populate resistor R30 with 1R Ohm resistor.

TDA 4425
1. Depopulate ferrite beads L10 and L17.
2. Populate ferrite beads L5 and L6 with Murata BLM18PG121SH1.

TDA 4502
1. Change R17, R21, R25, R27, R68, R85, R562, and R660 to 0.5% resistors due to parts availability.

CHANGE REVISION DEFECT TRACKING

<table>
<thead>
<tr>
<th>RDV</th>
<th>Change Description</th>
<th>Reference Defect Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>84</td>
<td>Removed buffers U500 and U520 from digital microphone data outputs.</td>
<td>EN0039218506 EN602191696</td>
</tr>
<tr>
<td>84</td>
<td>The Battery Charge DONE LED is disconnected and R521 is depopulated. New pins R42, C11 and U1 are added. Traces show required hand modifications.</td>
<td>EN0039218506 EN6602191893</td>
</tr>
<tr>
<td>84</td>
<td>Optional Power On Circuit has been disabled and U511 and R578 are now DNP. A new Diode D11 has been added to allow EIM_D13 to sense a button.</td>
<td>EN0039218506 EN6021916948</td>
</tr>
<tr>
<td>84</td>
<td>RESET button SW2 now connects to The PWREN pin of The PMIC.</td>
<td>EN0039218506 EN6021916979</td>
</tr>
<tr>
<td>84</td>
<td>Added 10K pull down resistor R33 to SDCKE0 trace.</td>
<td>EN0039218506 EN6602191692</td>
</tr>
<tr>
<td>84</td>
<td>SIM Card Connector CON3 is now populated by default.</td>
<td>EN00224087</td>
</tr>
<tr>
<td>84</td>
<td>Battery Connector Header CON3 is now populated by default.</td>
<td>EN00224089</td>
</tr>
<tr>
<td>84</td>
<td>Changed resistors R174 and R176 and to depopulated by default. LVDS0 EDID will not be connected to I2C channel unless needed.</td>
<td>EN0039218506 EN6021916965</td>
</tr>
<tr>
<td>84</td>
<td>Replaced digital microphones with Analog Devices ADMP421.</td>
<td>EN0039218506 EN6021916964</td>
</tr>
<tr>
<td>84</td>
<td>Enabled USR_DEF_GRN_LED circuit. Configured GPIO1 for WDDO_B output.</td>
<td>EN00224093</td>
</tr>
<tr>
<td>84</td>
<td>USB_DT_FAIL and DNP.</td>
<td>EN0039218506 EN6021916973</td>
</tr>
<tr>
<td>84</td>
<td>Q512 is Changed to populated.</td>
<td>EN0039218506 EN6021916943</td>
</tr>
<tr>
<td>84</td>
<td>Optional Start Up Circuit has been modified.</td>
<td>EN00224093</td>
</tr>
<tr>
<td>84</td>
<td>PMIC Programming Micro-Processor is removed.</td>
<td>EN00224093</td>
</tr>
<tr>
<td>84</td>
<td>Added DNP input to U13 buffer for USB_DTFAIL_PWR_EN. Buffer now powered from GEN 5V.</td>
<td>EN0039218506 EN6021915941</td>
</tr>
<tr>
<td>84</td>
<td>R17, R21, R25, R27, R68, R85, R562, and R660 to 0.5% resistors due to parts availability.</td>
<td>EN0039218506 EN6021916948</td>
</tr>
<tr>
<td>84</td>
<td>Added resistor options to EIM_D13 trace to EPD connector.</td>
<td>EN0039218506 EN6021916953</td>
</tr>
<tr>
<td>84</td>
<td>Connected EIM_D45 to EPDC Connector J508 to supply SDCS if needed.</td>
<td>EN0039218506 EN6021916950</td>
</tr>
<tr>
<td>84</td>
<td>Optional LDO 0.9V is now depopulated.</td>
<td>EN0039218506 EN6021916951</td>
</tr>
<tr>
<td>84</td>
<td>Added Connector J13 to support BT from SDIO Card. Connector is isolated by DNP resistors on Rev C boards.</td>
<td>EN0039218506 EN6021916946</td>
</tr>
<tr>
<td>84</td>
<td>Added GPIO control of Battery Charge Enable pins.</td>
<td>EN0039218506 EN6021916947</td>
</tr>
<tr>
<td>84</td>
<td>Change C555 to 0.22uF, changed C555 to 0.47uF, added C555 as second 22uF capacitor in parallel with C546, changed C561, C562, C566 and C568 to 0.47uF. Changes made per recommendation of NXP MFT0010/FPS team.</td>
<td>EN0039218506 EN6021916903</td>
</tr>
<tr>
<td>84</td>
<td>Added additional 4.7uF 0.1uF capacitor C765 to SD2 socket VDD supply.</td>
<td>EN0039218506 EN6021901494</td>
</tr>
<tr>
<td>84</td>
<td>Added option to route HDMI DDC2 comm from SD2 to HDMI in conform to HDMI 2.0 spec.</td>
<td>EN0039218506 EN6021902506</td>
</tr>
<tr>
<td>84</td>
<td>Moved populated to de bounces to RESET circuit.</td>
<td>EN0039218506 EN6021901495</td>
</tr>
<tr>
<td>84</td>
<td>Depopulated C68, C612, Populated C66, C716 closer to pins.</td>
<td>EN0039218506 EN6021901496</td>
</tr>
<tr>
<td>84</td>
<td>Depopulated C39, C606, C607, C608, C609, C610, C673 and C681.</td>
<td>EN0039218506 EN6021901497</td>
</tr>
<tr>
<td>84</td>
<td>Added DNP R502 to provide alternate 3V supply path to USB_H1, USB_D.</td>
<td>EN0039218506 EN6021901498</td>
</tr>
<tr>
<td>84</td>
<td>Added DNP R503 to provide alternate power supply path to USB_H1, USB_D.</td>
<td>EN0039218506 EN6021901499</td>
</tr>
</tbody>
</table>

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Freescale MCIMX6DL SMART DEVICE PLATFORM
TEMPORARY DEVIATIONS