### Revisions & Change Log

<table>
<thead>
<tr>
<th>Rev</th>
<th>Description</th>
<th>Date</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>Initial Draft</td>
<td>04/10/12</td>
<td>M. Norman</td>
</tr>
<tr>
<td>B</td>
<td>Prototype redefinition. KL25 XTAL capacitors C16 &amp; C19 changed from 10pF DNP to 22pF populated. Defined A5 signal from R25 M2</td>
<td>05/09/12</td>
<td>M. Norman</td>
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<tr>
<td>C</td>
<td>Prototype Release. Fixed J10 orientation according to Arduino R3 specification.</td>
<td>05/21/12</td>
<td>M. Norman</td>
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<tr>
<td>C61</td>
<td>Prototype Re-spin. Changed two pin headers to DNP bottom-shorting headers. Added support to ATMega128L-DP or ATMega128L-DSU. Defined power pinout.</td>
<td>06/29/12</td>
<td>M. Norman</td>
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<tr>
<td>C62</td>
<td>Prototype Re-spin. Changed two pin header (J11) location for on-board MCU SWD isolation. Changed to DNP non-production BOM parts BT1, J1, J2, J3, J4, J6, J7, J10, J11, J12. Removed OpenSDA average hint voltage legend.</td>
<td>07/10/12</td>
<td>M. Norman</td>
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<tr>
<td>D</td>
<td>Pilot Release. Changed 2pin header (J11) location for on-board MCU SWD isolation. Changed to DNP non-production BOM parts BT1, J1, J2, J3, J4, J6, J7, J10, J11, J12. Removed OpenSDA average hint voltage legend.</td>
<td>01/22/13</td>
<td>M. Norman</td>
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<tr>
<td>D</td>
<td>Production Re-spin. Fixing V. drop in ADC by changing R8 for R77 &amp; R80, and 3.0V zener D9 for 3.3V zener (R81). Changed rectifiers (D5, D8, D11) for NCP1554LG (D7, D9), D10, D11, D12 to enhance TF curve and current capability.</td>
<td>01/22/13</td>
<td>M. Norman</td>
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<tr>
<td>E</td>
<td>Production Re-spin. Adding J20 header to bypass D12 Vdrop. Changed J4 and J3 to no bottom-shorting headers and added BT3 &amp; BT4 0-pin instead, along with 1GHz current measuring. Added USB host functionality without electrical protection by placing J21 and R82 options. Updated KL25 symbol TPM to FTM function misnaming.</td>
<td>01/30/13</td>
<td>M. Norman</td>
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<tr>
<td></td>
<td>Production Re-spin. Adding 5V buck-boost circuit support by 1x3 pin header, J22 and C26-28 10uf capacitors</td>
<td>01/30/13</td>
<td>M. Norman</td>
</tr>
</tbody>
</table>
1. Unless otherwise specified:
   - All resistors are in ohms, 5%, 1/8 Watt
   - All capacitors are in uF, 20%, 50V
   - All voltages are DC
   - All polarized capacitors are aluminum electrolytic

2. Interrupted lines coded with the same letter or letter combinations are electrically connected.

3. Device type number is for reference only. The number varies with the manufacturer.

4. Special signal usage:
   - _B_ Denotes - Active-Low Signal
   - <> or [] Denotes - Vectored Signals

5. Interpret diagram in accordance with American National Standards Institute specifications, current revision, with the exception of logic block symbology.

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**I/O Header**

- **Mini-B USB**
- **Kinetics K-Series K20DX128VFM5**
  - 8 MHz
  - Serial Flash
  - SPI
- **OpenSDA**
  - 10-pin Debug
- **Kinetics L-Series KL25Z128VLK4 80 LQFP**
  - 8 MHz
  - SPI
  - SPI
  - 10-pin Debug
  - I2C, GPIO

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- Indicates optional items that will **not** be populated by default

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 touches: FRDM-KL25Z