Quick Start Guide  
RL78/G23-128p  
Fast Prototyping Board

(1) Downloading the user's manual
   Download the user's manual from the Web site below and check the full specifications before using the board.
   URL: https://www.renesas.com/rl78g23-128p_fp

(2) Package components
   RL78/G23-128p Fast Prototyping Board (RTK7RLG230CSN00BJ) and Quick Start Guide (this document)

(3) Table of board specifications

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Evaluation MCU</td>
<td>Part No.: R7F100GSN2DFB; package: 128-pin LFQFP</td>
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<tr>
<td>RL78/G23 with 128 pins</td>
<td>On-chip memory: 768-KB ROM, 48-KB RAM, 8-KB data flash memory</td>
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<tr>
<td>Push switches</td>
<td>Reset switch x 1, user switch x 1</td>
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<tr>
<td>LEDs</td>
<td>Power indicator: green x 1, user: green x 2</td>
</tr>
<tr>
<td>Capacitive touch buttons</td>
<td>2</td>
</tr>
<tr>
<td>Pmod™ connectors</td>
<td>Connectors: Angle type, 12 pins x 2</td>
</tr>
<tr>
<td>Arduino™ connectors</td>
<td>Connectors: 8 pins x 5, 10 pins x 1</td>
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<tr>
<td></td>
<td>The interfaces are partially compatible with Arduino™ Mega; digital pins D22 to D53 on Arduino™ Mega are not supported.</td>
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<tr>
<td>Grove connectors</td>
<td>Interface for Grove modules</td>
</tr>
<tr>
<td></td>
<td>I2C: x 4; UART: x 1</td>
</tr>
</tbody>
</table>

(4) Parts layout

- MCU header J3 (60 to 71)
- Power LED
- Reset switch
- Sub-clock
- Micro-USB connector
- RL78/G23 MCU
- Touch button
- Power-supply selection header
- Touch button
- Grove UART
- User switch
- MCU header J1 (23 to 47)
- MCU header J2 (48 to 59)
- Eight analog pins for Arduino™ MEGA x 2
- Eight power pins for Arduino™ MEGA
- Emulator connector
- Pmod™ Type 3A
- Grove I2C x 4
- User LED x 2
- Pmod™ Type 6A
- Ten digital pins for Arduino™ MEGA
- Eight digital pins for Arduino™ MEGA x 2
(5) Pmod™ interface

(6) Arduino™ interface