Features

- STM32L496AGI6 microcontroller featuring 1 Mbyte of Flash memory and 320 Kbytes of RAM in a UFBGA169 package
- USB OTG HS
- On-board current measurement
- SAI Audio CODEC
- ST-MEMS digital microphones
- 8-Mbit PSRAM
- 2 user LEDs
- 1 user and 1 reset push-buttons
- 4-direction joystick with selection button
- Board connectors:
  - Camera 8 bit
  - USB with Micro-AB
  - Stereo headset jack including analog microphone input
  - microSD™ card
- Board expansion connectors:
  - Arduino™ Uno V3
  - STMod+
- Board expansion features:
  - Quectel UG96 worldwide cellular modem penta-band 2G/3G module, 7.2 Mbps downlink, 5.76 Mbps uplink
  - Modem reset red LED and modem signaling green LED
  - ST Incard™ eSIM based on ST33
  - Switchable SIM interface, eSIM and MicroSIM
  - Pulse 2G/3G SMA antenna for frequency ranges: 850 / 900 / 1800 / 1900 / 2100 MHz
- Flexible power-supply options: ST-LINK, USB VBUS, or external sources
- On-board ST-LINK/V2-1 SWD, TAG debugger/programmer with USB re-enumeration capability; mass storage, virtual COM port and debug port
- Comprehensive free software libraries and examples available with the STM32Cube package
- Support of a wide choice of Integrated Development Environments (IDEs) including IAR™, Keil®, GCC-based IDEs

Description

The P-L496G-CELL01 STM32 discovery pack for 2G/3G cellular to cloud (STM32-C2C/2G-3G) is a turnkey development platform for cellular and cloud technology based solutions. The pack is composed of an ST32L496AGI6-based low-power discovery mother board with preloaded firmware, and an STMod+ cellular expansion board with antenna.
General information

The firmware of the P-L496G-CELL01 discovery pack runs on the STM32L496AGI6 Arm®-based device.

System requirements

- Windows® OS (7, 8 and 10), Linux® 64-bit or macOS®
- USB Type-A to Micro-B cable

Development toolchains

- Keil® MDK-ARM(a)
- IAR™ EWARM(a)
- GCC-based IDEs including free SW4STM32 from AC6

Demonstration software

The STM32 Flash preloaded demonstration software yields an electronic ST Voucher and a URL through the USB ST-Link Virtual COM port, which, through a dedicated STM32-C2C Concierge Portal, allows the Discovery Pack owner to enable corresponding services from ST and various partners, including many precompiled demo Flash binaries. The latest versions of the demonstration source code and associated documentation can be downloaded from the www.st.com webpage.

Ordering information

To order the P-L496G-CELL01 discovery pack refer to Table 1.

a. On Windows® only
Table 1. Ordering information

<table>
<thead>
<tr>
<th>Order code</th>
<th>Target STM32</th>
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<tbody>
<tr>
<td>P-L496G-CELL01</td>
<td>STM32L496AGI6</td>
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Technology partners

EMNIFY:
- IoT connectivity platform eSIM

QUECTEL:
- Penta-band 2G/3G module

EXOSITE:
- Cloud data management

GROVESTREAMS:
- IoT platform

Revision history

Table 2. Document revision history

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision</th>
<th>Changes</th>
</tr>
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<tbody>
<tr>
<td>12-Feb-2018</td>
<td>1</td>
<td>Initial version</td>
</tr>
<tr>
<td>22-Feb-2018</td>
<td>2</td>
<td>Updated Features to remove reference to Arm® Mbed™</td>
</tr>
<tr>
<td>24-May-2018</td>
<td>3</td>
<td>Updated Features to add ST Incard™ eSIM, and Demonstration software for precisions</td>
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