

DECT-ULE Expansion Board Data Brief

Description

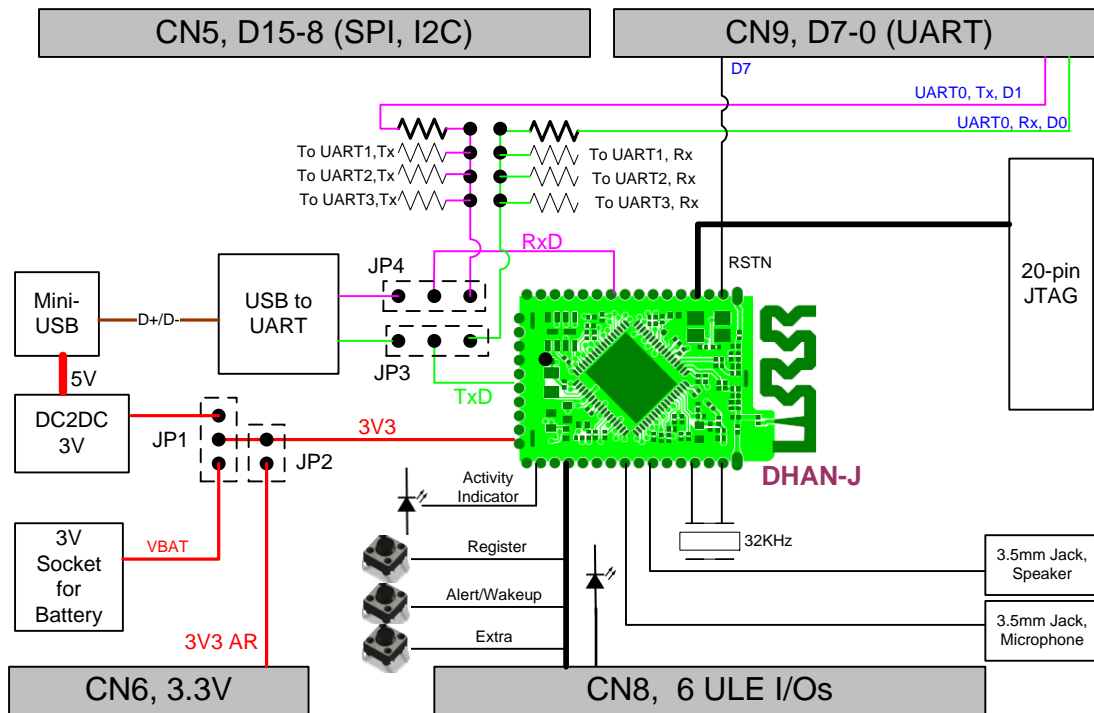
The DECT-ULE Expansion Board (**DU-EB**) includes a DECT-ULE Module (DHAN-J) which comes loaded with a SW image that accounts for the DECT-ULE PHY-MAC Protocol as well as for the ULE HAN-FUN Standard. The DU-EB has a 3.3V, Arduino R3 connector scheme which allows straightforward interfacing with applications running on the ST Nucleo (STM32), Arduino (eg M0) or other similar development platforms. The DU-EB, in conjunction with a ULE Hub (typically a ULE Dongle), can serve as both a learning vehicle or a development tool for creating application SW for a ULE Device.



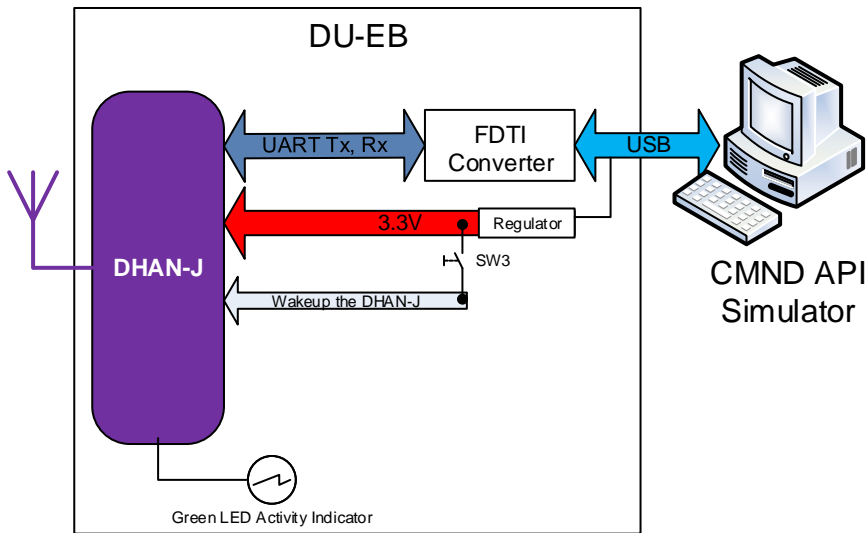
Features

- *Operates 1.9GHz frequency bands allocated by regulatory bodies (FCC Part15.239, ETSI EN300175, ARIB STD T101) exclusively to DECT-ULE protocol compliant devices.
- *Includes DHAN-J SMT radio module with on-board antenna. The DHAN-J has FCC Part15D regulatory certification, Industry Canada RSS-213 certification, as well as certification according to the Radio Equipment Directive (RED) 2014/53/EU.
- *Easily configurable (jumpers) for power supplied by USB, Battery or from the 3.3V pin at CN6 on the Arduino interface
- *Configurable (resistor jumpers) for routing of DHAN-J UART Rx/Tx to available pins on the Nucleo or Arduino development platform
- *Firmware on the DHAN-J can be upgraded either via JTAG, USB or over the air (SUOTA) from a ULE Hub
- *Can be controlled either via a PC running a simulator host (CMND API) or via an external MCU like the STM32
- *ULEasy reference SW is available - as libraries for Arduino or extension for the STM32Cube firmware
- *Can be configured to run a simple application directly on the DHAN-J – convenient for evaluation without an external development platform

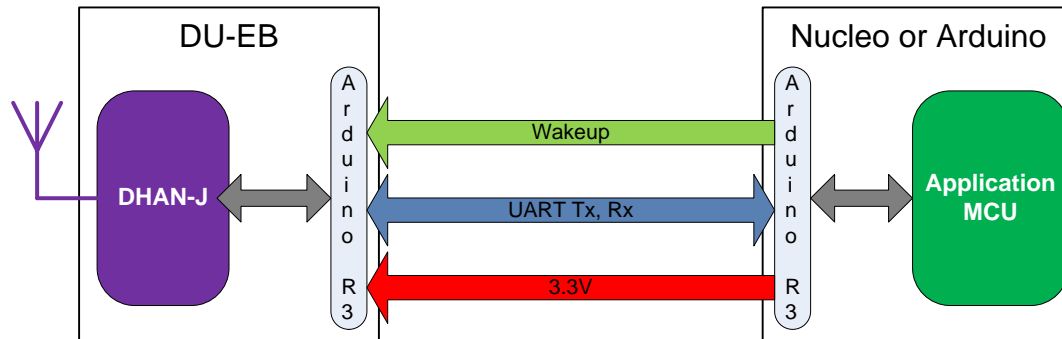
Expansion Board (EB) Block Diagram



Operation with CMND Simulator



Interconnect with External Development Platform



Related Documents

see <https://www.dspg.com/developers/>

*DHAN-J Data Brief

*ULE System Development Tool Brief

*Getting Started with ULEasy

DHAN-J Module Data Sheet DU-EB Part Number

HOMEA-DHX913-EXTDHNJ-NN-IL.BRD

Note: Can also be ordered as part of the ULE System Development Tool (HOMEA-DEVTOOL-BN-IL.SET)

This document is provided by DSP Group, Inc. and/or one or more of its subsidiaries (“DSP Group”). All information and data contained in this document is for informational purposes only, without any commitment on the part of DSP Group. DSP Group shall not be liable, in any event, for any claims for damages or any other remedy in any jurisdiction whatsoever, and shall not assume responsibility for patent infringements or other rights to third parties arising out of or in connection with this document. Further, DSP Group reserves the right to revise this publication and to make changes to its content, at any time, without obligation to notify any person or entity of such revision changes. These materials are copyrighted and any unauthorized use of these materials may violate copyright, trademark, and other laws. No part of this publication may be reproduced, photocopied, stored on a retrieval system, or transmitted without the express written consent of DSP Group. Any new issue of this document invalidates previous issues.

DSP Group reserves the right to revise this publication and to make changes to its content, at any time, without obligation to notify any person or entity of such revision changes.

© 2018 DSP Group. All rights reserved.

DSP Group Headquarters: 161 S San Antonio Rd, Suite 10, Los Altos CA 94022, Tel: (408)986-4300, Fax: (408)986-4323