## dialog smart{snippets}

|        | Software Features List (note 1)            | DA14580-00    | DA14580-01    |               |  |  |
|--------|--|---------------|---------------|---------------|--|--|
|        |  | 2.0.4         | 3.0.2         | 3.0.4         |  |  |
|        | "X" = Supported feature                    | release date: | release date: | release date: |  |  |
|        | "NS" = Not Supported Feature               | 23/12/2014    | 28/03/2014    | 30/06/2014    |  |  |
| 1      | Embedded Development Tools                 |               |               |               |  |  |
| 1.1    | Keil project environment                   | Х             | Х             | Х             |  |  |
| 1.2    | JTAG debugger                              | Х             | Х             | Х             |  |  |
| 1.3    | GNU / GCC toolset                          | NS            | NS            | Х             |  |  |
| 2      | Stack                                      |               |               |               |  |  |
| 2. 1   | Protocol features                          |               |               |               |  |  |
| 2.1.1  | Bluetooth Smart 4.1 core stack             | X             | Х             | Х             |  |  |
| 2.1.2  | MTU size                                   | 23            | 23            | 23            |  |  |
| 2.1.3  | Large packet support (L2CAP fragmentation) | NS            | Х             | Х             |  |  |
| 2.1.4  | Master mode                                | Х             | Х             | Х             |  |  |
| 2.1.5  | Slave mode                                 | Х             | Х             | Х             |  |  |
| 2.1.6  | Master and Slave sequentially              | Х             | Х             | Х             |  |  |
| 2.1.7  | Multilink support (maximum links)          | 4             | 6             | 6             |  |  |
| 2.1.8  | UUID 128bits                               | Х             | Х             | Х             |  |  |
| 2. 2   | Low Energy features                        |               |               |               |  |  |
| 2.2.1  | BLE timer wakeup                           | Х             | Х             | Х             |  |  |
| 2.2.2  | GPIO wakeup                                | Х             | Х             | Х             |  |  |
| 2.2.3  | Quadrature wakeup                          | Х             | Х             | Х             |  |  |
| 2.2.4  | Active mode                                | Х             | Х             | Х             |  |  |
| 2.2.5  | Extended Sleep Mode                        | Х             | Х             | Х             |  |  |
| 2.2.6  | Deep Sleep                                 | Х             | Х             | Х             |  |  |
| 3      | Profiles                                   |               |               |               |  |  |
| 3. 1   | Health Profile                             |               |               |               |  |  |
| 3.1.1  | Blood Pressure Profile                     | X             | Х             | Х             |  |  |
| 3.1.2  | Blood Pressure Service                     | X             | Х             | Х             |  |  |
| 3.1.3  | Glucose Profile                            | X             | Х             | Х             |  |  |
| 3.1.4  | Glucose Service                            | X             | Х             | Х             |  |  |
| 3.1.5  | Health Thermometer Profile                 | X             | Х             | Х             |  |  |
| 3.1.6  | Health Thermometer Service                 | X             | Х             | Х             |  |  |
| 3. 2   | Sports and Fitness Profile                 |               |               |               |  |  |
| 3.2.1  | Cycling Power Profile                      | NS            | NS            | Х             |  |  |
| 3.2.2  | Cycling Power Service                      | NS            | NS            | Х             |  |  |
| 3.2.3  | Cycling Speed and Cadence Profile          | X             | Х             | Х             |  |  |
| 3.2.4  | Cycling Speed and Cadence Service          | Х             | Х             | Х             |  |  |
| 3.2.5  | Location and Navigation Profile            | NS            | NS            | Х             |  |  |
| 3.2.6  | Location and Navigation Service            | NS            | NS            | Х             |  |  |
| 3.2.7  | Heart Rate Profile                         | X             | Х             | Х             |  |  |
| 3.2.8  | Heart Rate Service                         | Х             | Х             | Х             |  |  |
| 3.2.9  | Running Speed and Cadence Profile          | Х             | Х             | Х             |  |  |
| 3.2.10 | Running Speed and Cadence Service          | X             | Х             | Х             |  |  |

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|-------|---------------------------------|---------------|---------------|---------------|
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|       | "X" = Supported feature         | release date: | release date: | release date: |
|       | "NS" = Not Supported Feature    | 23/12/2014    | 28/03/2014    | 30/06/2014    |
| 3. 3  | Proximity Profile               |               |               |               |
| 3.3.1 | Proximity Profile               | X             | Х             | Х             |
| 3.3.2 | Find Me Profile                 | X             | Х             | Х             |
| 3. 4  | Alerts and time Profile         |               |               |               |
| 3.4.1 | Time Profile                    | X             | Х             | Х             |
| 3.4.2 | Current Time Service            | X             | Х             | Х             |
| 3.4.3 | Reference Time Update Service   | X             | Х             | Х             |
| 3.4.4 | Next DST Change Service         | X             | Х             | Х             |
| 3.4.5 | Phone Alert Status Profile      | X             | Х             | Х             |
| 3.4.6 | Phone Alert Status Service      | X             | Х             | Х             |
| 3.4.7 | Alert Notification Profile      | X             | Х             | Х             |
| 3.4.8 | Alert Notification Service      | X             | Х             | Х             |
| 3.4.9 | Immediate Alert Service         | X             | Х             | Х             |
| 3. 5  | Peripherals Profile             |               |               |               |
| 3.5.1 | HID over GATT Profile           | X             | Х             | Х             |
| 3.5.2 | HID Service                     | X             | Х             | Х             |
| 3. 6  | Generic Profile                 |               |               |               |
| 3.6.1 | Scan Parameters Profile         | X             | Х             | Х             |
| 3.6.2 | Scan Parameters Service         | X             | X             | Х             |
| 3.6.3 | Battery Service                 | X             | X             | X             |
| 3.6.4 | Device Information Service      | X             | X             | Х             |
| 3.6.5 | Link Loss Service               | X             | X             | X             |
| 3.6.6 | Tx Power Service                | X             | Х             | Х             |
| 3.6.7 | Accelerometer                   | X             | X             | Х             |
| 4     | Peripheral Device Drivers/HAL   |               |               |               |
| 4.1   | UART driver                     | NS            | X             | X             |
| 4.2   | GPIO driver                     | NS            | X             | X             |
| 4.3   | SPI driver                      | NS            | Х             | Х             |
| 4.4   | SPI Flash driver                | NS            | Х             | Х             |
| 4.5   | I2C EEPROM driver               | NS            | Х             | Х             |
| 4.6   | ADC driver                      | NS            | Х             | Х             |
| 4.7   | Battery Level driver            | NS            | Х             | Х             |
| 4.8   | PWM driver                      | NS            | Х             | Х             |
| 4.9   | Quadrature driver               | NS            | Х             | Х             |
| 4.10  | Wakeup timer driver             | NS            | Х             | Х             |

## dialog smart {snippets} DA14580-00 Software Features List (note 1) DA14580-01 2.0.4 3.0.2 3.0.4 "X" = Supported feature release date: release date: release date: "NS" = Not Supported Feature 30/06/2014 23/12/2014 28/03/2014 **Tools & Utilities** 5.1 Software Patching Over The Air X Χ X 5.2 Connection Manager Χ Χ Χ External microcontroller interface through SPI 5.3 Χ Χ Χ 5.4 Booting from extrenal SPI flash memory Х Χ Х 5.5 EEPROM access through I2C Х Χ Χ 5.6 Production test utility Χ Χ Χ 5.7 Dual image boot support NS Χ Χ 5.8 Flash programmer NS Χ Χ 5.9 Software Upgrade Over The Air to SPI Flash (SUOTA) NS NS Х 6 **Smart Snippets** 6.1 OTP programmer Χ Χ Χ 6.2 Power Profiler Χ Χ Χ 6.3 **UART Booter** Χ Χ Х Sleep Advisor NS 6.4 Χ Χ 6.5 Command Line (CLI) tool Production tests Χ 6.6 OTP Software Patching Over The Air (SPOTA) NS Χ Χ 6.7 FLASH programmer NS Χ Χ JTAG programming support 6.8 NS NS Х Software Upgrade Over The Air to SPI Flash (SUOTA) 6.9 NS NS Χ NS NS 6.1 Data rate evaluation tool х **Application Examples** 7.1 Proximity 7.1.1 Ext. Processor proximity monitor Χ Χ Х 7.1.2 Integrated Processor proximity reporter Χ Х Χ 7.1.3 Integrated Processor proximity reporter Χ Χ Х 7.2 Software upgrade over the air (using ext Flash) Χ Χ Х 7.3 Integrated Processor Template project Χ Χ 7.4 NS Secondary boot loader Χ

**Note 1:** This document specifies the features of the DA14580 Software Development Kit. Additional Software features are available in the DA14580 Reference Designs available at: http://support.dialog-semiconductor.com/ref-designs