Murata Electronics EU 2018 Ref.: DIALOG_FL_1

High security Bluetooth® semiconductors with expandable memory

Dialog's SmartBond™ DA14682 and DA14683 for Smart Home, Industrial and Wearable devices is the worlds' first single-chip solution, whilst meeting superior security standards and quality. Bluetooth 5 and Bluetooth mesh are supported in these highly integrated System-on-Chip (SoC) devices and include a number of top of the line features and cutting-edge security supporting both consumers and developers.

SmartBond™ DA14682 and DA14683

- High-security
- Bluetooth 5 solution
- Expandable memory
- Note: 1.3 x 2.6 x 0.95 mm (CapChip) Size 2.3 x 2.6 x 0.95 mm (CapChip)
- Output I/F I2C / SPI



Our passive starter kit supports the reference design of Dialog DA14682 & DA14683 with our range of capacitors, inductor, and crystal.

Our latest kit will provide you with a comprehensive set of components with supporting part information to give everything you need to support your design when implementing DA14682 or DA14683.

- Packaged in passive components in collaboration with Dialog for performance maximization.
- Pack with everything you need to support your design.
- Optional components for small size application available.

Visit our reference design page

Get it now

EKSM-PDADA1A-KIT supporting DA14682/DA14683

https://go.murata.com/pdada1a















Dialog starter kit contents

| | Dialog | | Murata | | | | |
|--------------|--|----------|--|------------------------------------|--|--|------------|
| Designator | DA14682 AQFN vD DA14683 AQFN vD DA14683 WLCSP vE | | Capacitor Inductor Timing Device (CRYSTAL) | | | | |
| | Description | Quantity | Status | Description size mm (inch) | Description | Parts number | Kit Qty |
| C1, C10, C11 | 1.0uF, X5R, +/-10%, 6.3V | 3 | Option | 0.6x0.3 (0201) | 1.0uF, X5R, +/-20%, 6.3V | GRM033R60J105MEA2 | 30 |
| C2, C3 | 4.7uF, X5R, +/-20%, 6.3V | 2 | Dialog Confirmed Option | 1.0x0.5 (0402) 0.6x0.3 (0201) | 4.7uF, X5R, +/-20%, 6.3V 4.7uF, X5R, +/-20%, 6.3V | GRM155R60J475ME47 GRM035R60J475ME15 | 20 20 |
| C4, C5 | 10uF, X5R, +/-20%, 16V | 2 | Dialog Confirmed | 1.6x0.8 (0603) | 10uF, X5R, +/-20%, 16V | GRM188R61C106MA73 | 20 |
| C6, C7, C8 | 4.7uF, X5R, +/-20%, 10V | 3 | Dialog Confirmed Option | 1.0x0.5 (0402) 1.0x0.5 (0402) | 4.7uF, X5R, +/-20%, 10V 4.7uF, X5R, +/-20%, 10V | ZRB15XR61A475ME01 GRM155R61A475MEAA | 30 30 |
| С9 | 100nF, X7R, +/-10%, 16V | 1 | Option Option | 0.6x0.3 (0201) 0.6x0.3 (0201) | 100nF, X6S, +/-10%, 16V 100nF, X5R, +/-10%, 16V | GRM033C81C104KE14 GRM033R61C104KE14 | 10 10 |
| Z2, Z4 | 10pF, COG(NP0), 50V | 2 | Option Option | 0.6x0.3 (0201) 0.4x0.2 (01005) | 10pF, C0G(EIA), 50V 10pF, C0G(EIA), 50V | GRM0335C1H100JA01 GRM0225C1H100JA03 | 20 20 |
| L1 | 470nH, 1.2A, 60mΩ | 1 | Option | 2.0×1.25 | 470nH, 1.8A, 50mΩ | LQM21PNR47MGH | 10 |
| Y1 | CRYSTAL 16.000MHZ 10PF SMT | 1 | Dialog Confirmed Dialog Confirmed | 2.0x1.6/HCR2016 1.6x1.2/MCR1612 | CRYSTAL 32.0000MHZ* 6PF SMT CRYSTAL 32.0000MHZ* 6PF SMT | XRCGB32M000F2P29R0 XRCMD32M000FXQ52R0 | 10 10 |

^{*} It can be used for 16MHz.

