

## 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
- Size 2.3 x 2.6 x 0.95 mm (CapChip)
- Output I/F I2C / SPI

### Murata starter kit

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

Designator	Dialog		Murata				
	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
<b>C1, C10, C11</b>	1.0uF, X5R, +/-10%, 6.3V	3	Option	0.6x0.3 (0201)	1.0uF, X5R, +/-20%, 6.3V	GRM033R60J105MEA2	30
<b>C2, C3</b>	4.7uF, X5R, +/-20%, 6.3V	2	Dialog Confirmed	1.0x0.5 (0402)	4.7uF, X5R, +/-20%, 6.3V	GRM155R60J475ME47	20
			Option	0.6x0.3 (0201)	4.7uF, X5R, +/-20%, 6.3V	GRM035R60J475ME15	20
<b>C4, C5</b>	10uF, X5R, +/-20%, 16V	2	Dialog Confirmed	1.6x0.8 (0603)	10uF, X5R, +/-20%, 16V	GRM188R61C106MA73	20
<b>C6, C7, C8</b>	4.7uF, X5R, +/-20%, 10V	3	Dialog Confirmed	1.0x0.5 (0402)	4.7uF, X5R, +/-20%, 10V	ZRB15XR61A475ME01	30
			Option	1.0x0.5 (0402)	4.7uF, X5R, +/-20%, 10V	GRM155R61A475MEAA	30
<b>C9</b>	100nF, X7R, +/-10%, 16V	1	Option	0.6x0.3 (0201)	100nF, X6S, +/-10%, 16V	GRM033C81C104KE14	10
			Option	0.6x0.3 (0201)	100nF, X5R, +/-10%, 16V	GRM033R61C104KE14	10
<b>Z2, Z4</b>	10pF, COG(NP0), 50V	2	Option	0.6x0.3 (0201)	10pF, COG(EIA), 50V	GRM0335C1H100JA01	20
			Option	0.4x0.2 (01005)	10pF, COG(EIA), 50V	GRM0225C1H100JA03	20
<b>L1</b>	470nH, 1.2A, 60mΩ	1	Option	2.0x1.25	470nH, 1.8A, 50mΩ	LQM21PNR47MGH	10
<b>Y1</b>	CRYSTAL 16.000MHZ 10PF SMT	1	Dialog Confirmed	2.0x1.6/HCR2016	CRYSTAL 32.0000MHZ* 6PF SMT	XRCGB32M000F2P29R0	10
			Dialog Confirmed	1.6x1.2/MCR1612	CRYSTAL 32.0000MHZ* 6PF SMT	XRCMD32M000FXQ52R0	10

\* It can be used for 16MHz.