

# SystemMaster Basic (SMB)

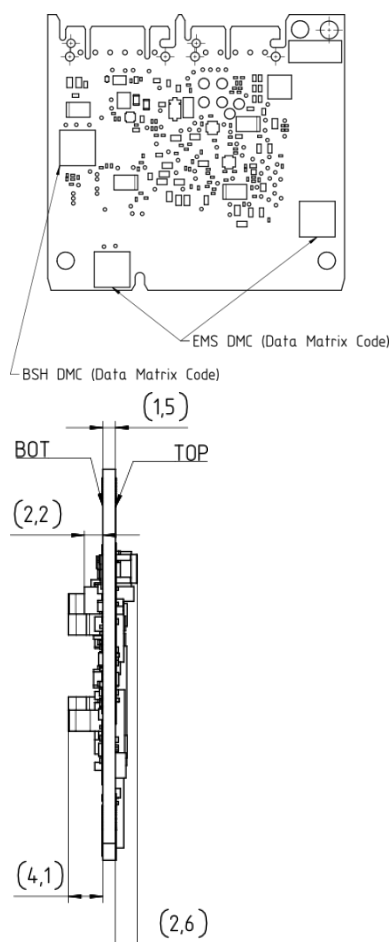
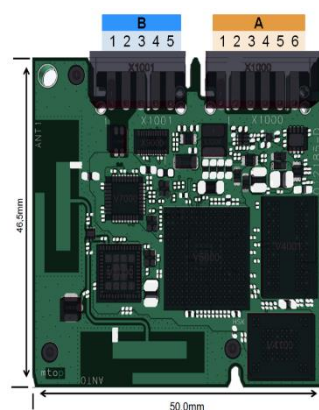
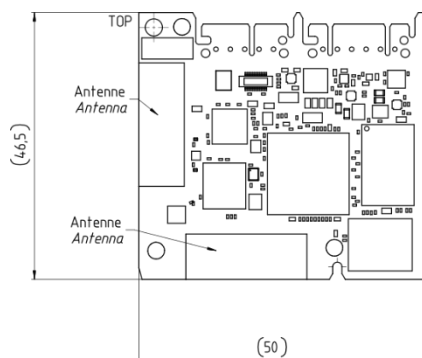
## Installation Guide US

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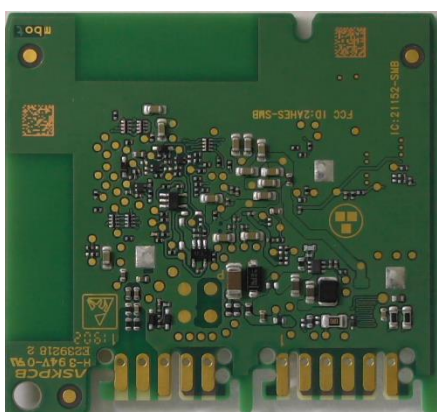
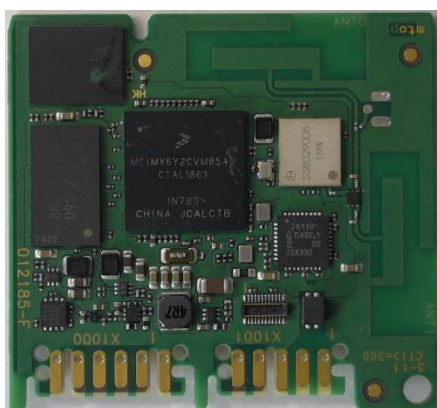
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## 1 General

- This is an installation guide for SMB module which helps you to integrate the module in your BSH appliance. For detailed information please refer to the confidential documents “SMM Basic Module Datasheet” (TC No. 60100003470820) and „HW Reference Manual“ (TC No. 60100002915468).
- The SMB module is designed for use inside a home appliance. It is a communication module which enables WiFi and Bluetooth communication of appliances. The integration has to be done without any changes of the module. SMB will be connected via BSH D-Bus. No component parts exist for this module (e.g. no external antenna).
- Document Version
  - 1.0 10.07.2019 Bollinger initial Version
  - 1.1 24.07.2019 Bollinger completely reworked
  - 1.2 27.08.2019 Bollinger updated label, correction of standard
  - 1.3 26.11.2019 Bollinger info for labelling HA, required user statement for FCC/IC, removed reference on regulatory, added CMIIT ID
  - 1.4 19.12.2019 Bollinger removed 2,4GHz 802.11n 40HT
  - 1.5 23.01.2020 Bollinger updated printing



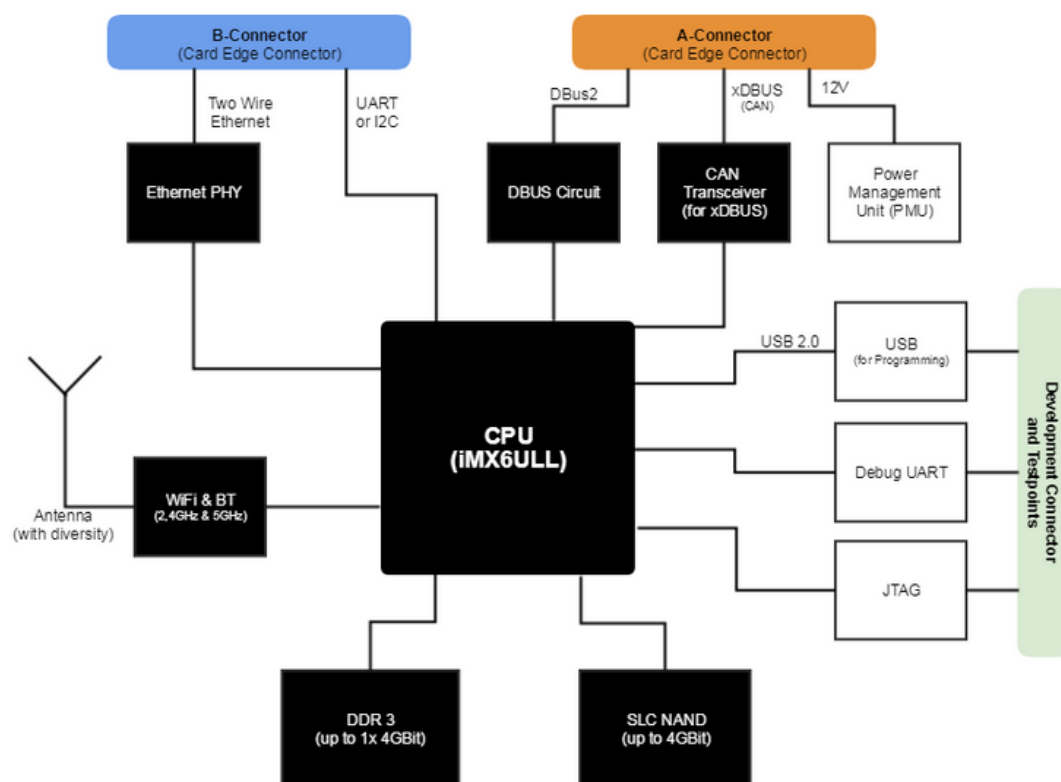
## 3 General technical info



Dimensions	46,5 * 50 mm
Connections	BSH internal Bus card edge connector (6 pins) BSH internal Bus card edge connector (5 pins) 1x Debug connector (20 pins)
Wi-Fi	802.11b/g/n/ac
BT	V4.2
RF	antenna diversity with 2x onboard dual-band antennas,
Supply	7 ..... 16V
Ambient op. temperature	-20°C ... +85°C

Further details please refer to BSH confidential documents “SMM Basic Module Datasheet” (TC No. 60100003470820) and „HW Reference Manual“ (TC No. 60100002915468).

## 4 Block Diagram



## 5 Details of radio

### 5.1 WiFi Band (1/3)

■ Description of use	IEEE802.11b/g/n 2,4 GHz
■ TX frequency	2400 – 2472 MHz
■ Channel bandwidth	20 MHz
■ No. of channels	11
■ Max output power (DSSS)	18 dBm
■ Antenna gain internal antenna	2,25 dBi / 1,64 dBi
■ Antenna gain external antenna	no external antenna
■ Type of modulation	CCK, DQPSK, DBPSK for DSSS, 64QAM, 16QAM, QPSK, BPSK for OFDM

**The user is not able to change the country code settings or increase the output power on any unit marked with this FCC or ISED ID.**

## 5.2 WiFi Band (2/3)

■ Description of use	IEEE802.11a/n/ac 5 GHz
■ TX frequency	5150 – 5350 MHz
■ Channel bandwidth	20/40/80MHz
■ No. of channels	8/4/2
■ Max output power (OFDM)	18 dBm
■ Antenna gain internal antennas	3,99 dBi / 3,14 dBi
■ Antenna gain external antenna	no external antenna
■ Type of modulation	256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM

**The user is not able to change the country code settings or increase the output power on any unit marked with this FCC or ISED ID.**



## 5.3 WiFi Band (3/3)

■ Description of use	IEEE802.11a/n/ac 5 GHz
■ TX frequency	5470 – 5835 MHz
■ Channel bandwidth	20/40/80 MHz
■ No. of channels	17/8/4
■ Max output power (OFDM)	18 dBm
■ Antenna gain internal antennas	3,99 dBi / 3,14 dBi
■ Antenna gain external antenna	no external antenna
■ Type of modulation	256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM

**The user is not able to change the country code settings or increase the output power on any unit marked with this FCC or ISED ID.**

## 5.4 BT

■ Description of use	BT version 4.2
■ TX frequency	2400 – 2483,5 MHz
■ Channel bandwidth	1MHz
■ No. of channels	79
■ Typical output power	3,5 dBm
■ Antenna gain internal antenna	2,25 dBi / 1,64 dBi

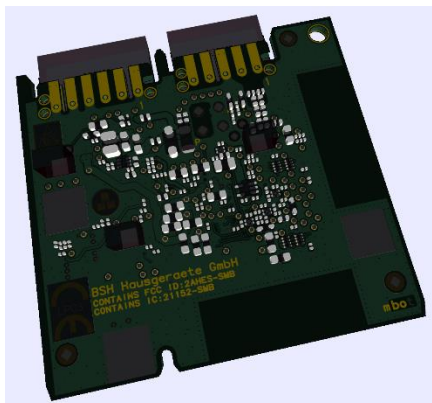
## 5.5 BLE

■ Description of use	BT version 4.2 (LE)
■ TX frequency	2400 – 2483,5 MHz
■ Channel bandwidth	2MHz
■ No. of channels	40
■ Typical output power	3,5 dBm
■ Antenna gain internal antenna	2,25 dBi / 1,64 dBi

## 6 Software

The software of the module is designed to be updated over the air. For information according the current software version it is necessary to have the module integrated in an appliance and to use the Home Connect App.

## 7 Printing

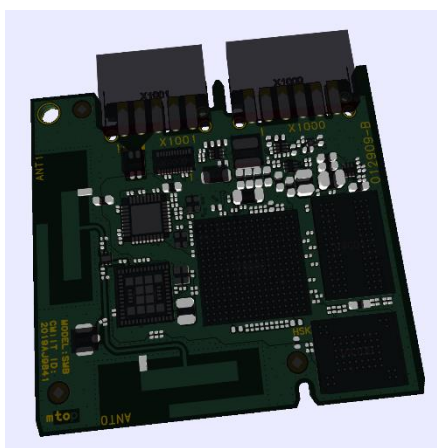


### Printing bottom

BSH Hausgeraete GmbH

CONTAINS FCC ID: 2AHES-SMB

CONTAINS IC: 21152-SMB



### Printing top

MODEL: SMB

CMIIT ID: 2019AJ9841

### Systemmaster producer

#### Bosch

Robert Bosch Electronique SAS

15 Rue Charles Coulomb

14120 Mondeville

France

### Labelling of the appliance

On label of the appliance following content shall be visible:

Contains FCC ID: 2AHES-SMB

Contains IC: 21152-SMB

## 8 Mounting

### Mounting position limitations

Please refer to BSH confidential documents “SMM Basic Module Datasheet” (TC No. 60100003470820) and „HW Reference Manual“ (TC No. 60100002915468) for details

*The module is designed to be used in a mobile device which will be used in such a way that a separation distance of at least 20cm is.*

*Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.*

*This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:*

- (1) This device may not cause interference.*
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.*

*This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:*

- (1) This device may not cause interference*
- (2) This device must accept any interference, including interference that may cause undesired operation of the device..*

*Cet appareil contient des émetteurs / récepteurs exemptés de licence conformes aux RSS (RSS) d'Innovation, Sciences et Développement économique Canada. Le fonctionnement est soumis aux deux conditions suivantes:(1) Cet appareil ne doit pas causer d'interférences(2) Cet appareil doit accepter toutes les interférences, y compris celles susceptibles de provoquer un fonctionnement indésirable de l'appareil.*

## 9 Safety

Safety testing of the module according to:

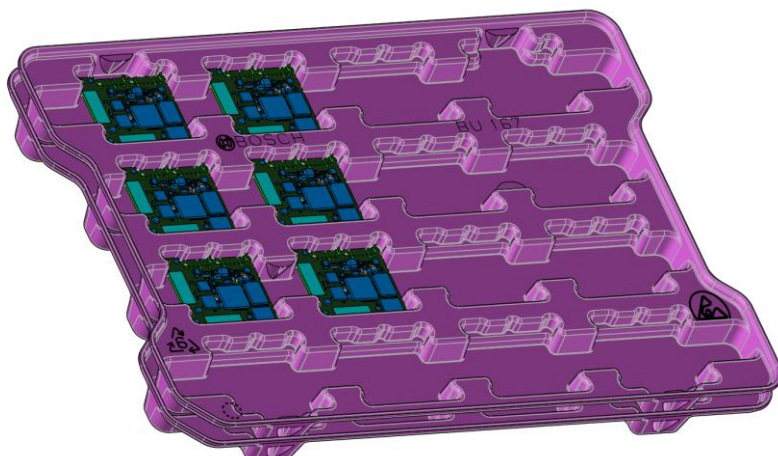
DIN EN 60730-1

DIN EN 60335-1

As the module is designed for use in a home appliance, it is not tested according to DIN EN 62368-1

## 10 Packing

The SystemMaster Basic is delivered to the factory with stacked 4x4 blister (reusable!)  
Quantity will be 96 pieces per box. (6 + 1 tray lid)



### Packing sticker

On the box following sticker will be glued

N° Produit (P) <b>8001155353</b>																																			
		Produit <b>SMM EXT ST V02</b>																																	
Quantité (Q) <b>288</b>	Référence fournisseur (305) <b>1038308620600</b>																																		
Fournisseur / Usine (V) <b>0000440335</b>																																			
Date (yy.mm.dd) 09:18 <b>P 19.05.28</b>		Etat de modification, construction *																																	
N° d'étiquette (S) <b>368205039</b>	N° Lot (H)																																		
		<table border="1"> <tr> <td>BE</td><td>BG</td><td>CZ</td><td>DK</td><td>DE</td><td>EE</td><td>IE</td><td>EL</td> </tr> <tr> <td>ES</td><td>FR</td><td>HR</td><td>IT</td><td>CY</td><td>LV</td><td>LT</td><td>LU</td> </tr> <tr> <td>HU</td><td>MT</td><td>NL</td><td>AT</td><td>PL</td><td>PT</td><td>RO</td><td>SI</td> </tr> <tr> <td>SK</td><td>FI</td><td>SE</td><td>UK</td><td>NO</td><td>CH</td><td>TR</td><td></td> </tr> </table>		BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR	HR	IT	CY	LV	LT	LU	HU	MT	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK	NO	CH	TR	
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ES	FR	HR	IT	CY	LV	LT	LU																												
HU	MT	NL	AT	PL	PT	RO	SI																												
SK	FI	SE	UK	NO	CH	TR																													
Robert Bosch (France) SAS BP41 14125 Mondeville Cedex		Transport Label Odette Ver. 1 Rev. 5																																	
		Made In France																																	



## 11 Declaration

### Declaration of Conformity

BSH Hausgeräte GmbH hereby declares that the appliance which features Home Connect is in accordance with the basic requirements and the other relevant provisions of the directive 2014/53/EU.

A detailed RED Declaration of Conformity can be found online at [www.siemens-home.bsh-group.com](http://www.siemens-home.bsh-group.com) on the product page of your appliance with the additional documents.



2.4 GHz band: max. 100 mW

5 GHz band: max. 100 mW



BE	BG	CZ	DK	DE	EE	IE	EL
ES	FR	HR	IT	CY	LV	LT	LU
HU	MT	NL	AT	PL	PT	RO	SI
SK	FI	SE	UK	NO	CH	TR	

5 GHz Wi-Fi: for indoor use only