

SystemMaster M2

Installation Guide

(FCC/ISED)

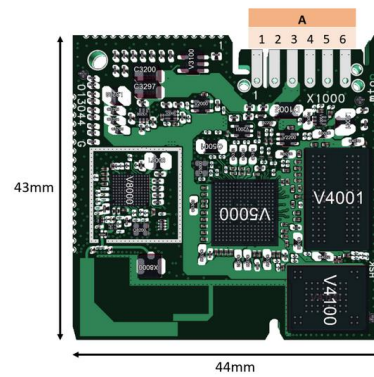
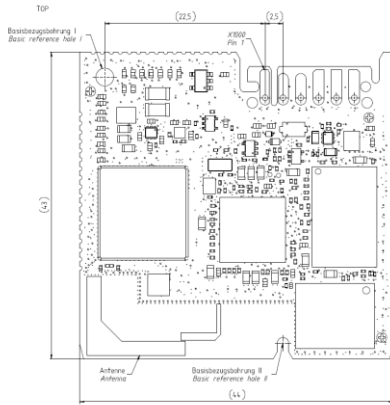
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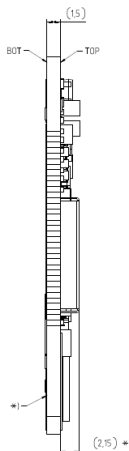
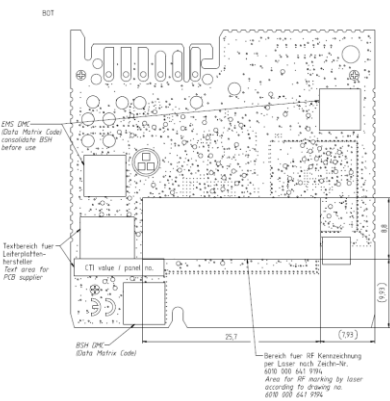
1 General

- This is an installation guide for M2 module which helps you to integrate the module in your BSH appliance. For detailed information please refer to the confidential documents “eP_SMM_M2_Module_Datasheet” (TC No. 60100006131948) and „HW Reference Manual“ (TC No. 60100006125632).
- The M2 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. M2 will be connected via BSH D-Bus. No component parts exist for this module (e.g. no external antenna).
- Document Version
 - 1.0 15.09.2021 Bollinger initial Version, FCC and ISED version
 - 1.1 12.11.2021 Bollinger Block diagram in separate file
 - 1.2 23.02.2022 Bollinger labeling and mounting updated

2 Mechanical



Connector view (color)



BSH DMC:

A Datamatrix Code which contains information for BSH Tracking

EMS DMC:

A Datamatrix Code which contains information for tracking at EMS of SystemMaster. Both of them might be used.

Side view

Weight: ??g

3 General technical info

Dimensions	43 * 44 mm
Connections	BSH internal Bus card edge connector (6 pins) 52 Castellated pads
Wi-Fi	802.11 a/b/g/n/ac
BT	V4.2
RF	onboard dual-band antenna
Supply	4,4 16V (V02)
Ambient op. temperature	0°C ... +70°C (V02)

Further details please refer to BSH confidential documents “eP_SMM_M2_Module_Datasheet” (TC No. 60100006131948) and „HW Reference Manual“ (TC No. 60100006125632).

4 Block Diagram

See confidential file "M2 - Block diagram FCC ISED.jpg"

5 Details of radio

5.1 WiFi Band (1/4)

■ Description of use	IEEE802.11b/g/n 2,4 GHz
■ TX frequency	2412 – 2462 MHz
■ Channel bandwidth	20 /40 MHz
■ No. of channels	11
■ Max output power (DSSS)	20 dBm
■ Antenna gain internal antenna	2,1 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 (2/4)

■ Description of use	IEE802.11a/n/ac 5 GHz
■ TX frequency	5150 – 5350 MHz
■ Channel bandwidth	20/40/80MHz
■ No. of channels	8/4/2
■ Max output power (OFDM)	20 dBm
■ Antenna gain internal antennas	4,3 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 (3/4)

■ Description of use	IEE802.11a/n/ac 5 GHz
■ TX frequency	5470 – 5725 MHz
■ Channel bandwidth	20/40/80 MHz
■ No. of channels	12/6/3
■ Max output power (OFDM)	20 dBm
■ Antenna gain internal antennas	4,3 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 WiFi Band (4/4)

■ Description of use	IEEE802.11a/n/ac 5 GHz
■ TX frequency	5725 – 5850 MHz
■ Channel bandwidth	20/40/80 MHz
■ No. of channels	5/2/1
■ Max output power (OFDM)	20 dBm
■ Antenna gain internal antennas	4,3 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.

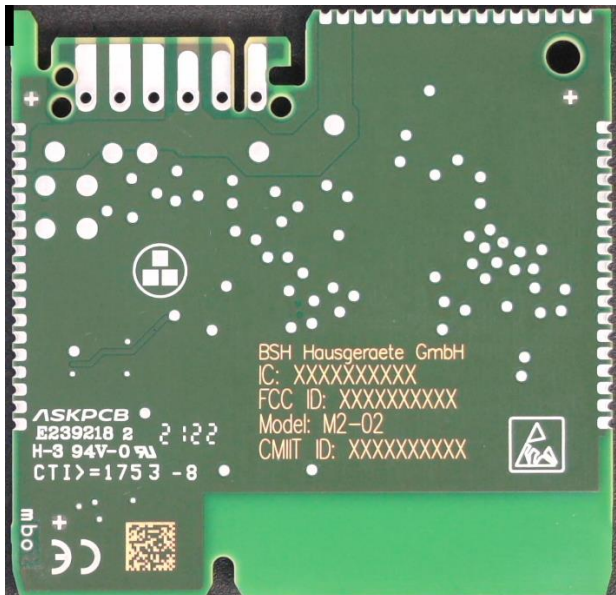
5.5 BLE

■ 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	2,1 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

CMIIT ID: 2021AJ15358

FCC ID: 2AHES-M2

IC: 21152-M2

MODEL: M2-02

Systemmaster producer

Bosch

Robert Bosch Electronique SAS
15 Rue Charles Coulomb
14120 Mondeville
France

Jabil

Jabil Poland Sp. z o.o.
ul. Milosna 32
82-500 Kwidzyn
Poland

Labelling of the appliance

On label of the appliance following content shall be visible:
Contains FCC ID: 2AHES-M2
Contains IC: 21152-M2

8 Mounting

Mounting position limitations

Please refer to BSH confidential documents “eP_SMM_M2_Module_Datasheet” (TC No. 60100006131948) and „HW Reference Manual“ (TC No. 60100006125632) 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.

Appliances only for indoor use.

Module will be integrated only by BSH and companies commissioned by BSH.

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:

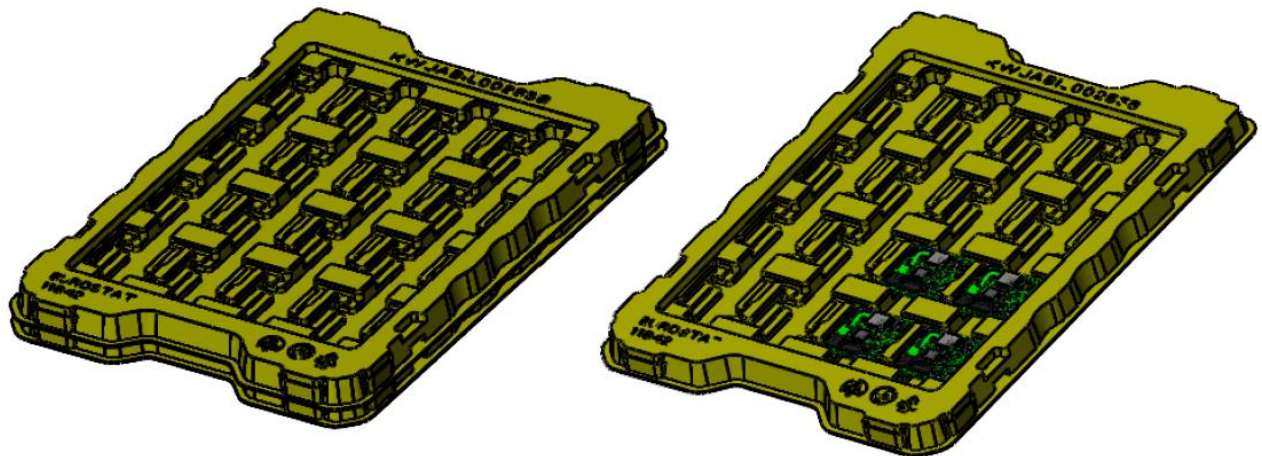
DIN EN 60730-1

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 M2 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) 8001162077 			
Quantité (Q) 96 	Produit SMM BAS SA V02		
Fournisseur / Usine (V) 0000440335 	Référence fournisseur (BOS) 1038308616600 		
N° d'étiquette (S) 376182616 	Date (yy.mm.dd) 14:27 P 19.12.02	Etat de modification, construction	
<small>Robert Bosch (France) SAS 36310 Montreuil Cedex</small>	BE BG CZ DK DE EE IE EL ES FR HR IT CY LV LT LJ HU MT NL AT PL PT RO SI SK FI SE UK NO CH TR		
<small>Transport Label 08000 Ver. 1 Rev. 1</small>		<small>Made in France</small>	

11 Declaration



2.4 GHz band (2400–2483.5 MHz): max. 100 mW

5 GHz band (5150–5350 MHz + 5470–5725 MHz): max. 100 mW

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

5 GHz WLAN: for indoor use only

AL	BA	MD	ME	MK	RS	UK	UA	
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5 GHz WLAN: for indoor use only