

Release Note

ISO 26262 Functional Safety Packages for AVR[®] DB Family

Packages

Packages covered by release note	ISO 26262 Basic Package
Target devices	AVR [®] DB microcontroller family
Version	2.0
Date (yyyy.mm.dd):	2022.03.02

List of Contents in Packages

ltem	Doc. ID/Revision	Release Date (yyyy.mm.dd)	Basic
ISO 26262 FMEDA for AVR32DBxx	FS-00146/B	2022.02.23	Х
ISO 26262 FMEDA for AVR64DBxx	FS-00145/B	2022.02.23	X
ISO 26262 FMEDA for AVR128DBxx	FS-00073/C	2022.02.23	X
Safety Manual for AVR [®] Dx microcontroller families	DS-40002397/A	2022.02.14	Х

About the Contents in the Package

An FMEDA provides the base FIT rate of the device. It also provides the means to determine the residual FIT rate when the relevant diagnostic mechanisms are selected in the FMEDA by the system integrator.

A safety manual describes in detail how the device is to be used from both a hardware and software perspective in a safety-critical application that must conform to the ISO 26262 safety standard.

Refer to ISO 26262 Automotive Functional Safety - PIC16, PIC18 and AVR[®] for more information about the functional safety packages.

Version History

Version	Changes
2.0	The packages have been updated as follows:
	ISO 26262 FMEDA for AVR32DBxx, rev. B
	ISO 26262 FMEDA for AVR64DBxx, rev. B
	ISO 26262 FMEDA for AVR128DBxx, rev. C
	Safety Manual for AVR [®] DB microcontroller family, rev. C replaced with Safety Manual for AVR [®] Dx microcontroller families, rev A.
1.0	Packages created. Include the following items:
	ISO 26262 FMEDA for AVR32DBxx, rev. A
	ISO 26262 FMEDA for AVR64DBxx, rev. A
	ISO 26262 FMEDA for AVR128DBxx, rev. B
	Safety Manual for AVR [®] DB microcontroller family, rev. C

The Microchip Website

Microchip provides online support via our website at www.microchip.com/. This website is used to make files and information easily available to customers. Some of the content available includes:

- Product Support Data sheets and errata, application notes and sample programs, design resources, user's
 guides and hardware support documents, latest software releases and archived software
- **General Technical Support** Frequently Asked Questions (FAQs), technical support requests, online discussion groups, Microchip design partner program member listing
- **Business of Microchip** Product selector and ordering guides, latest Microchip press releases, listing of seminars and events, listings of Microchip sales offices, distributors and factory representatives

Product Change Notification Service

Microchip's product change notification service helps keep customers current on Microchip products. Subscribers will receive email notification whenever there are changes, updates, revisions or errata related to a specified product family or development tool of interest.

To register, go to www.microchip.com/pcn and follow the registration instructions.

Customer Support

Users of Microchip products can receive assistance through several channels:

- Distributor or Representative
- Local Sales Office
- Embedded Solutions Engineer (ESE)
- Technical Support

Customers should contact their distributor, representative or ESE for support. Local sales offices are also available to help customers. A listing of sales offices and locations is included in this document.

Technical support is available through the website at: www.microchip.com/support

Microchip Devices Code Protection Feature

Note the following details of the code protection feature on Microchip products:

- · Microchip products meet the specifications contained in their particular Microchip Data Sheet.
- Microchip believes that its family of products is secure when used in the intended manner, within operating specifications, and under normal conditions.
- Microchip values and aggressively protects its intellectual property rights. Attempts to breach the code
 protection features of Microchip product is strictly prohibited and may violate the Digital Millennium Copyright
 Act.
- Neither Microchip nor any other semiconductor manufacturer can guarantee the security of its code. Code
 protection does not mean that we are guaranteeing the product is "unbreakable". Code protection is constantly
 evolving. Microchip is committed to continuously improving the code protection features of our products.

Legal Notice

This publication and the information herein may be used only with Microchip products, including to design, test, and integrate Microchip products with your application. Use of this information in any other manner violates these terms. Information regarding device applications is provided only for your convenience and may be superseded by updates. It is your responsibility to ensure that your application meets with your specifications. Contact your local Microchip sales office for additional support or, obtain additional support at www.microchip.com/en-us/support/design-help/client-support-services.

THIS INFORMATION IS PROVIDED BY MICROCHIP "AS IS". MICROCHIP MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND WHETHER EXPRESS OR IMPLIED, WRITTEN OR ORAL, STATUTORY OR OTHERWISE, RELATED TO THE INFORMATION INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE, OR WARRANTIES RELATED TO ITS CONDITION, QUALITY, OR PERFORMANCE.

IN NO EVENT WILL MICROCHIP BE LIABLE FOR ANY INDIRECT, SPECIAL, PUNITIVE, INCIDENTAL, OR CONSEQUENTIAL LOSS, DAMAGE, COST, OR EXPENSE OF ANY KIND WHATSOEVER RELATED TO THE INFORMATION OR ITS USE, HOWEVER CAUSED, EVEN IF MICROCHIP HAS BEEN ADVISED OF THE POSSIBILITY OR THE DAMAGES ARE FORESEEABLE. TO THE FULLEST EXTENT ALLOWED BY LAW, MICROCHIP'S TOTAL LIABILITY ON ALL CLAIMS IN ANY WAY RELATED TO THE INFORMATION OR ITS USE WILL NOT EXCEED THE AMOUNT OF FEES, IF ANY, THAT YOU HAVE PAID DIRECTLY TO MICROCHIP FOR THE INFORMATION.

Use of Microchip devices in life support and/or safety applications is entirely at the buyer's risk, and the buyer agrees to defend, indemnify and hold harmless Microchip from any and all damages, claims, suits, or expenses resulting from such use. No licenses are conveyed, implicitly or otherwise, under any Microchip intellectual property rights unless otherwise stated.

Trademarks

The Microchip name and logo, the Microchip logo, Adaptec, AnyRate, AVR, AVR logo, AVR Freaks, BesTime, BitCloud, CryptoMemory, CryptoRF, dsPIC, flexPWR, HELDO, IGLOO, JukeBlox, KeeLoq, Kleer, LANCheck, LinkMD, maXStylus, maXTouch, MediaLB, megaAVR, Microsemi, Microsemi logo, MOST, MOST logo, MPLAB, OptoLyzer, PIC, picoPower, PICSTART, PIC32 logo, PolarFire, Prochip Designer, QTouch, SAM-BA, SenGenuity, SpyNIC, SST, SST Logo, SuperFlash, Symmetricom, SyncServer, Tachyon, TimeSource, tinyAVR, UNI/O, Vectron, and XMEGA are registered trademarks of Microchip Technology Incorporated in the U.S.A. and other countries.

AgileSwitch, APT, ClockWorks, The Embedded Control Solutions Company, EtherSynch, Flashtec, Hyper Speed Control, HyperLight Load, IntelliMOS, Libero, motorBench, mTouch, Powermite 3, Precision Edge, ProASIC, ProASIC Plus, ProASIC Plus logo, Quiet- Wire, SmartFusion, SyncWorld, Temux, TimeCesium, TimeHub, TimePictra, TimeProvider, TrueTime, WinPath, and ZL are registered trademarks of Microchip Technology Incorporated in the U.S.A.

Adjacent Key Suppression, AKS, Analog-for-the-Digital Age, Any Capacitor, AnyIn, AnyOut, Augmented Switching, BlueSky, BodyCom, CodeGuard, CryptoAuthentication, CryptoAutomotive, CryptoCompanion, CryptoController, dsPICDEM, dsPICDEM.net, Dynamic Average Matching, DAM, ECAN, Espresso T1S, EtherGREEN, GridTime, IdealBridge, In-Circuit Serial Programming, ICSP, INICnet, Intelligent Paralleling, Inter-Chip Connectivity, JitterBlocker, Knob-on-Display, maxCrypto, maxView, memBrain, Mindi, MiWi, MPASM, MPF, MPLAB Certified logo, MPLIB, MPLINK, MultiTRAK, NetDetach, NVM Express, NVMe, Omniscient Code Generation, PICDEM, PICDEM.net, PICkit, PICtail, PowerSmart, PureSilicon, QMatrix, REAL ICE, Ripple Blocker, RTAX, RTG4, SAM-ICE, Serial Quad I/O, simpleMAP, SimpliPHY, SmartBuffer, SmartHLS, SMART-I.S., storClad, SQI, SuperSwitcher, SuperSwitcher II, Switchtec, SynchroPHY, Total Endurance, TSHARC, USBCheck, VariSense, VectorBlox, VeriPHY, ViewSpan, WiperLock, XpressConnect, and ZENA are trademarks of Microchip Technology Incorporated in the U.S.A. and other countries.

SQTP is a service mark of Microchip Technology Incorporated in the U.S.A.

The Adaptec logo, Frequency on Demand, Silicon Storage Technology, Symmcom, and Trusted Time are registered trademarks of Microchip Technology Inc. in other countries.

GestIC is a registered trademark of Microchip Technology Germany II GmbH & Co. KG, a subsidiary of Microchip Technology Inc., in other countries.

All other trademarks mentioned herein are property of their respective companies.

[©] 2022, Microchip Technology Incorporated and its subsidiaries. All Rights Reserved.

ISBN: 978-1-6683-0022-0

Quality Management System

For information regarding Microchip's Quality Management Systems, please visit www.microchip.com/quality.



Worldwide Sales and Service

MERICAS	ASIA/PACIFIC	ASIA/PACIFIC	EUROPE
orporate Office	Australia - Sydney	India - Bangalore	Austria - Wels
355 West Chandler Blvd.	Tel: 61-2-9868-6733	Tel: 91-80-3090-4444	Tel: 43-7242-2244-39
handler, AZ 85224-6199	China - Beijing	India - New Delhi	Fax: 43-7242-2244-393
el: 480-792-7200	Tel: 86-10-8569-7000	Tel: 91-11-4160-8631	Denmark - Copenhagen
ax: 480-792-7277	China - Chengdu	India - Pune	Tel: 45-4485-5910
echnical Support:	Tel: 86-28-8665-5511	Tel: 91-20-4121-0141	Fax: 45-4485-2829
/ww.microchip.com/support	China - Chongqing	Japan - Osaka	Finland - Espoo
Veb Address:	Tel: 86-23-8980-9588	Tel: 81-6-6152-7160	Tel: 358-9-4520-820
ww.microchip.com	China - Dongguan	Japan - Tokyo	France - Paris
tlanta	Tel: 86-769-8702-9880	Tel: 81-3-6880- 3770	Tel: 33-1-69-53-63-20
uluth, GA	China - Guangzhou	Korea - Daegu	Fax: 33-1-69-30-90-79
el: 678-957-9614	Tel: 86-20-8755-8029	Tel: 82-53-744-4301	Germany - Garching
ax: 678-957-1455	China - Hangzhou	Korea - Seoul	Tel: 49-8931-9700
ustin, TX	Tel: 86-571-8792-8115	Tel: 82-2-554-7200	Germany - Haan
el: 512-257-3370			-
	China - Hong Kong SAR	Malaysia - Kuala Lumpur	Tel: 49-2129-3766400
Boston	Tel: 852-2943-5100	Tel: 60-3-7651-7906	Germany - Heilbronn
Vestborough, MA	China - Nanjing	Malaysia - Penang	Tel: 49-7131-72400
el: 774-760-0087	Tel: 86-25-8473-2460	Tel: 60-4-227-8870	Germany - Karlsruhe
ax: 774-760-0088	China - Qingdao	Philippines - Manila	Tel: 49-721-625370
Chicago	Tel: 86-532-8502-7355	Tel: 63-2-634-9065	Germany - Munich
asca, IL	China - Shanghai	Singapore	Tel: 49-89-627-144-0
el: 630-285-0071	Tel: 86-21-3326-8000	Tel: 65-6334-8870	Fax: 49-89-627-144-44
ax: 630-285-0075	China - Shenyang	Taiwan - Hsin Chu	Germany - Rosenheim
allas	Tel: 86-24-2334-2829	Tel: 886-3-577-8366	Tel: 49-8031-354-560
ddison, TX	China - Shenzhen	Taiwan - Kaohsiung	Israel - Ra'anana
el: 972-818-7423	Tel: 86-755-8864-2200	Tel: 886-7-213-7830	Tel: 972-9-744-7705
ax: 972-818-2924	China - Suzhou	Taiwan - Taipei	Italy - Milan
etroit	Tel: 86-186-6233-1526	Tel: 886-2-2508-8600	Tel: 39-0331-742611
lovi, MI	China - Wuhan	Thailand - Bangkok	Fax: 39-0331-466781
el: 248-848-4000	Tel: 86-27-5980-5300	Tel: 66-2-694-1351	Italy - Padova
louston, TX	China - Xian	Vietnam - Ho Chi Minh	Tel: 39-049-7625286
el: 281-894-5983	Tel: 86-29-8833-7252	Tel: 84-28-5448-2100	Netherlands - Drunen
ndianapolis	China - Xiamen		Tel: 31-416-690399
loblesville, IN	Tel: 86-592-2388138		Fax: 31-416-690340
el: 317-773-8323	China - Zhuhai		Norway - Trondheim
ax: 317-773-5453	Tel: 86-756-3210040		Tel: 47-72884388
el: 317-536-2380			Poland - Warsaw
.os Angeles			Tel: 48-22-3325737
lission Viejo, CA			Romania - Bucharest
el: 949-462-9523			Tel: 40-21-407-87-50
ax: 949-462-9608 el: 951-273-7800			Spain - Madrid
			Tel: 34-91-708-08-90
aleigh, NC			Fax: 34-91-708-08-91
el: 919-844-7510			Sweden - Gothenberg
lew York, NY			Tel: 46-31-704-60-40
el: 631-435-6000			Sweden - Stockholm
San Jose, CA			Tel: 46-8-5090-4654
el: 408-735-9110			UK - Wokingham
el: 408-436-4270			Tel: 44-118-921-5800
Canada - Toronto			Fax: 44-118-921-5820
el: 905-695-1980			
ax: 905-695-2078			

Release Note

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Microchip: FBP-AVR-EA-ISO26262