

## **Product Change Notification: CAAN-17JHA0978**

Date:

20-Feb-2025

# **Product Category:**

**Linear Regulators** 

### **Notification Subject:**

CCB 7364.011 Initial Notice: Qualification of Microchip Technology Gresham – Fab 4 (GRTM) as a new fabrication location for selected MCP1702, MCP1703 and MCP1703A device families available in various packages.

#### **Affected CPNs:**

CAAN-17JHAO978\_Affected\_CPN\_02202025.pdf CAAN-17JHAO978 Affected CPN 02202025.csv

**PCN Status:** Initial Notification

PCN Type: Manufacturing Change

**Microchip Parts Affected:** Please open one of the files found in the Affected CPNs section. Note: For your convenience Microchip includes identical files in two formats (.pdf and .xls)

**Description of Change:** Qualification of Microchip Technology Gresham – Fab 4 (GRTM) as a new fabrication location for selected MCP1702, MCP1703 and MCP1703A device families available in various packages.

#### **Pre and Post Summary Changes:**

	Pre Change	Post Change
Fabrication Site*	Microchip Technology Tempe – Fab 2 (TMGR)	Microchip Technology Gresham – Fab 4 (GRTM)
Wafer Size	8"	8"

Impacts to Datasheet: None

Change Impact: None

**Reason for Change:** To improve manufacturability and on time delivery performance by qualifying a new fabrication location (GRTM - FAB 4), which is a Microchip-owned facility that offers significant expansion potential to better meet future client demand. \*Note: The attached file called Tempe\_Fab2\_IATF\_Decertification is for the manufacturing site deactivation of Microchip Technology Tempe – Fab 2 (TMGR), contact your local Microchip sales office for inquiries.

**Change Implementation Status:** In Progress

**Estimated Qualification Completion Date:** August 2025

**Note:** Please be advised the qualification completion times may be extended because of unforeseen business conditions however implementation will not occur until after qualification has completed and a final PCN has been issued. The final PCN will include the qualification report and estimated first ship date. Also note that after the estimated first ship date guided in the final PCN customers may receive pre and post change parts.

#### **Timetable Summary:**

	Febr	February 2025					August 2025					
Work Week		06	07	08	09	>	32	33	34	35	36	
Initial PCN Issue Date				Х								
Qual Report Availability									Х			
Final PCN Issue Date									Х			

Method to Identify Change: Traceability Code

Qualification Plan: Please open the attachments included with this PCN labeled as PCN\_#\_Qual\_Plan.

**Revision History:** February 20, 2025: Issued initial notification.

**Note:** The change described in this PCN does not alter Microchip's current regulatory compliance regarding the material content of the applicable product.

#### **Attachments:**

Tempe-Fab2-IATF-Decertification.pdf PCN\_CAAN-17JHA0978\_Qualification\_Plan.pdf

Please contact your local **Microchip sales office** with questions or concerns regarding this notification.

#### **Terms and Conditions:**

If you wish to <u>receive Microchip PCNs via email</u> please register for our PCN email service at our **PCN home page** select register then fill in the required fields. You will find instructions about registering for Microchips PCN email service in the **PCN FAQ** section.

If you wish to <u>change your PCN profile</u>, <u>including opt out</u>, please go to the **PCN home page** select login and sign into your myMicrochip account. Select a profile option from the left navigation bar and make the applicable selections.

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#### Affected Catalog Part Numbers (CPN)

MCP1703T-4502E/CB

MCP1703T-4502E/MB

MCP1703T-5001E/CB

MCP1703T-5001E/MB

MCP1703T-5002E/CB

MCP1703T-5002E/CBHAZ

MCP1703T-5002E/CBVAO

MCP1703T-5002E/DB

MCP1703T-5002E/MB

MCP1703T-5002E/MC

MCP1703T-5002E/MCAAC

MCP1702-1202E/TO

MCP1702-1502E/TO

MCP1702-1802E/TO

MCP1702-2502E/TO

MCP1702-2802E/TO

MCP1702-3002E/TO

MCP1702-3302E/TO

MCP1702-3602E/TO

MCP1702-4002E/TO

MCP1702-4002E/TOVAO

MCP1702-5002E/TO

MCP1702RT-5002E/MB

MCP1702T-1202E/CB

MCP1702T-1202E/MB

MCP1702T-1502E/CB

MCP1702T-1502E/MB

MCP1702T-1802E/CB

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CAAN-17JHAO978 - CCB 7364.011 Initial Notice: Qualification of Microchip Technology Gresham - Fab 4 (GRTM) as a new fabrication location for selected MCP1702, MCP1703 and MCP1703A device families available in various packages. MCP1703-1202E/DB MCP1703-1502E/DB MCP1703-1802E/DB MCP1703-2502E/DB MCP1703-2802E/DB MCP1703-3002/WAAA MCP1703-3002E/DB MCP1703-3302E/DB MCP1703-3302E/TO MCP1703-4002E/DB MCP1703-5002E/DB MCP1703A-1202E/DB MCP1703A-1202E/MC MCP1703A-1502E/DB MCP1703A-1502E/MC MCP1703A-1802E/DB MCP1703A-1802E/MC MCP1703A-2052E/DB MCP1703A-2502E/DB MCP1703A-2502E/MC MCP1703A-2802E/DB MCP1703A-2802E/MC MCP1703A-3002E/DB MCP1703A-3002E/MC MCP1703A-3072E/DB MCP1703A-3302E/DB MCP1703A-3302E/MC MCP1703A-4002E/DB MCP1703A-4002E/MC MCP1703A-4102E/DB MCP1703A-5002E/DB Date: Thursday, February 20, 2025

CAAN-17JHAO978 - CCB 7364.011 Initial Notice: Qualification of Microchip Technology Gresham - Fab 4 (GRTM) as a new fabrication location for selected MCP1702, MCP1703 and MCP1703A device families available in various packages. MCP1703A-5002E/DBVAO MCP1703A-5002E/MC MCP1703AT-1202E/CB MCP1703AT-1202E/DB MCP1703AT-1202E/MB MCP1703AT-1202E/MC MCP1703AT-1502E/CB MCP1703AT-1502E/DB MCP1703AT-1502E/MB MCP1703AT-1502E/MC MCP1703AT-1802E/CB MCP1703AT-1802E/DB MCP1703AT-1802E/MB MCP1703AT-1802E/MBVAO MCP1703AT-1802E/MC MCP1703AT-1852E/MC MCP1703AT-2052E/CB MCP1703AT-2052E/DB MCP1703AT-2052E/MB MCP1703AT-2102E/CB MCP1703AT-2502E/CB MCP1703AT-2502E/DB MCP1703AT-2502E/MB MCP1703AT-2502E/MC MCP1703AT-2502E/MCVAO MCP1703AT-2802E/CB MCP1703AT-2802E/DB MCP1703AT-2802E/MB MCP1703AT-2802E/MC MCP1703AT-3002E/CB MCP1703AT-3002E/DB

CAAN-17JHAO978 - CCB 7364.011 Initial Notice: Qualification of Microchip Technology Gresham - Fab 4 (GRTM) as a new fabrication location for selected MCP1702, MCP1703 and MCP1703A device families available in various packages. MCP1703AT-3002E/MB MCP1703AT-3002E/MC MCP1703AT-3072E/DB MCP1703AT-3072E/MB MCP1703AT-3152E/CB MCP1703AT-3301E/DB MCP1703AT-3302E/CB MCP1703AT-3302E/CBAAC MCP1703AT-3302E/CBVAO MCP1703AT-3302E/DB MCP1703AT-3302E/DBVAO MCP1703AT-3302E/MB MCP1703AT-3302E/MBVAO MCP1703AT-3302E/MC MCP1703AT-3502E/CB MCP1703AT-4002E/CB MCP1703AT-4002E/DB MCP1703AT-4002E/MB MCP1703AT-4002E/MC MCP1703AT-4102E/DB MCP1703AT-4102E/MB MCP1703AT-5001E/CB MCP1703AT-5001E/CBAAA MCP1703AT-5001E/DB MCP1703AT-5002E/CB MCP1703AT-5002E/CBVAO MCP1703AT-5002E/DB MCP1703AT-5002E/DBVAO MCP1703AT-5002E/MB MCP1703AT-5002E/MBVAO MCP1703AT-5002E/MC Date: Thursday, February 20, 2025

CAAN-17JHAO978 - CCB 7364.011 Initial Notice: Qualification of Microchip Technology Gresham - Fab 4 (GRTM) as a new fabrication location for selected MCP1702, MCP1703 and MCP1703A device families available in various packages. MCP1703AT-5002E/MCAAB MCP1703AT-5002E/MCVAO MCP1703RT-5002E/MB MCP1703T-1202E/CB MCP1703T-1202E/DB MCP1703T-1202E/MB MCP1703T-1202E/MC MCP1703T-1502E/CB MCP1703T-1502E/CBVAO MCP1703T-1502E/DB MCP1703T-1502E/MB MCP1703T-1802E/CB MCP1703T-1802E/DB MCP1703T-1802E/MB MCP1703T-1802E/MC MCP1703T-2402E/CB MCP1703T-2402E/DB MCP1703T-2502E/CB MCP1703T-2502E/DB MCP1703T-2502E/MB MCP1703T-2502E/MC MCP1703T-2802E/CB MCP1703T-2802E/DB MCP1703T-2802E/MB MCP1703T-3002E/CB MCP1703T-3002E/CBVAO MCP1703T-3002E/DB MCP1703T-3002E/MB MCP1703T-3002E/MC MCP1703T-3301E/CB MCP1703T-3301E/DB

CAAN-17JHAO978 - CCB 7364.011 Initial Notice: Qualification of Microchip Technology Gresham – Fab 4 (GRTM) as a new fabrication location for selected MCP1702, MCP1703 and MCP1703A device families available in various packages.

MCP1703T-3302E/CB

MCP1703T-3302E/CBVAO

MCP1703T-3302E/CBVAO-BW

MCP1703T-3302E/DB

MCP1703T-3302E/MB

MCP1703T-3302E/MBAAD

MCP1703T-3302E/MC

MCP1703T-3502E/CB

MCP1703T-3602E/CB

MCP1703T-4002E/CB

MCP1703T-4002E/DB

MCP1703T-4002E/MB

MCP1703T-4002E/MC



# **QUALIFICATION PLAN SUMMARY**

PCN#: CAAN-17JHAO978

Date: February 07, 2025

Qualification of Microchip Technology Gresham – Fab 4 (GRTM) as a new fabrication location for selected MCP1702, MCP1703 and MCP1703A device families available in various packages.

Purpose:

Qualification of Microchip Technology Gresham – Fab 4 (GRTM) as a new fabrication location for selected MCP1702, MCP1703 and MCP1703A device families available in various packages will qualify by similarity (QBS). This is Q100 Grade 1 qualification.

CCB No.: 7413.002 and 7364.011

	IA 11 '		OTDE				
	Assembly site		GTBF				
	BD Number		A-075068				
	MP Code (MPC		HBAA1YA5XVA1				
Misc.	Part Number (C	PN)	MCP1702T-5002E/MBVAO				
<u>iviisc.</u>	MSL information	n	MSL-1				
	Assembly Shipp	ping Media (T/R, Tube/Tray)	T/R				
	Base Quantity N	Multiple (BQM)	1000				
	Reliability Site		MTAI				
	Paddle size		72 x 81				
	Material		KFC/LY89				
	DAP Surface P	rep	Selective Ag Plating				
	Treatment		Non-rough				
Lead-Frame	Process		Stamp				
<u>Leau-Frame</u>	Lead-lock		No				
	Part Number		200000020271				
	Lead Plating		Matte Tin				
	Strip Size		199x26				
	Strip Density		72				
Bond Wire	Material		Au				
	Part Number		CRM1191AR-A				
Dio Attach	Conductive		No				
<u>Die Attach</u>	Backside Coat	Material	8006NS				
	(If Applicable)	Conductive	No				
MC	Part Number		CEL-9240HF10L8				
DICC	Package Type		SOT-89				
<u>PKG</u>	Pin/Ball Count		3L				
			-				

Test Name	Conditions	Grade 1: -40°C to +125°C (MCHP E Temp)	Pre & Post Reliability Stress Test Temperature Grade 1: -40°C to +125°C (MCHP E Temp)	Sample Size	Min. Qty of Spares per Lot (should be properly marked)	Qty of Lots	Total Units	Fail Acce pt Qty	Est. Dur. Days	Special Instructions
- WBP	Mil. Std. 883-2011			5	0	1	5	0 fails after TC	5	30 bonds from a min. 5 devices.
Wire Bond Shear - WBS	CDF-AEC-Q100-001			5	0	1	5	0	5	30 bonds from a min. 5 devices.
External Visual	Mil. Std. 883-2009/2010			All devices prior to submissio n for qualificati on testing	0	3	ALL	0	5	
Temp Storage Life)	JESD22-A103 +125°C, +150°C or +175°C	Grade 1: 500 hrs (+175°C) or 1000 hrs (150°C)	·	45	5	1	50	0	83	Spares should be properly identified.
	020 JESD22- A113 +150°C Bake for 24 hours, moisture loading requirements per MSL level + 3X reflow at peak reflow temperature per Jedec-STD-020E for package type. MSL-1		Grade 1: +25°C	231	15	3	738	0		Spares should be properly identified. 77 parts from each lot to be used for HAST,
HAST	JESD22-A101 or A110 +130°C/85% RH for 96 hrs or +110°C/85%RH for 264 hrs	Grade 1: 96 hrs (+130°C/85% RH) or 264 hrs (+110°C/85%RH)	Grade 1: +25°C, +125°C	77	5	3	246	0		Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
UHAST	JESD22-A102, A118, or A101 +130°C/85% RH for 96 hrs or +110°C/85% RH for 264 hrs	Grade 1: 96 hrs (+130°C/85% RH) or 264 hrs (+110°C/85% RH)	Grade 1: +25°C	77	5	3	246	0	10	Spares should be properly identified. Use the parts which have gone through Pre-conditioning.
Temp Cycle	JESD22-A104 and Appendix 3 -55°C to +125°C, -55°C to +150°C	Grade 1: 1000 cycles (-55°C to +150°C)	Grade 1: +25°C, +125°C	77	5	3	246	0		Spares should be properly identified. Use the parts which have gone through Pre-conditioning.

Purpose:

Qualification of Microchip Technology Gresham – Fab 4 (GRTM) as a new fabrication location for selected MCP1702, MCP1703 and MCP1703A device families available in various packages.

7364.011 CCB No.:

Test	Number of Lot/s	Sample Size (per lot)	Total Samples	Conditions
ELFR	3	800	2400	48 hours @ 125°C
Q100	3	77	231	1008 Hours @ 125°C
ESD (CDM)	3	12	36	750V @ 25°C
ESD (HBM)	3	12	36	2000V @25°C
E3D (HBIVI)			30	2000V @125°C
Latch Up	3	12	36	+/- 100mA @ 25°C
Lateri Op		12	50	+/- 100mA @ 125°C
Electrical Distribution F2F Comparison	3	33	99	From -40°C to 125°C



Date: January 30, 2025

RE: Tempe (Fab 2) Wafer Fabrication Facility ISO/IATF Decertification

IATF Certificate: 08435-2002-AQ-HOU-IATF-33RSTM

On December 2, 2024, Microchip announced manufacturing restructuring plans that include the closure of the Tempe (Fab 2) Wafer Fabrication Facility.

This memo is to further announce that as part of the facility closure, its active IATF-16949 certificate will be withdrawn, in early Q3, 2025. Additionally, the facility will be removed from Microchip's Corporate ISO-9001 certificate by the end of 2025.

Microchip is committed to ensuring product quality during the entire time that Fab 2 remains operational. All established and certified process control measures remain in place and adherence to these practices will continue for the life of the fab, regardless of the status of IATF-16949 certification. Additionally, all Microchip devices are 100% electrically tested, with only known good products shipped to customers.

Please contact your local <u>Microchip Sales Office</u> with questions or concerns regarding this notification.

Regards,

Microchip Corporate Quality Systems