Microsemi Corporation

May 11, 2016

Product/Process Change Notification No: PCN1601

Change Classification: Minor

Subject: eNVM page lock settings for SmartFusion®2 and IGLOO®2 devices

Summary of Changes

This is to notify you about a specification change related to the locking and unlocking of embedded flash (eNVM) pages on some SmartFusion2 and IGLOO2 devices.

Description of Changes

For Security Devices

For S (security) devices, there are two or four 4-KB regions per eNVM array that can be protected for read and write; these regions are known as protected 4K regions or special sectors. If write protection is enabled for any of these regions, none of the locked pages inside the same eNVM block can be unlocked. Do not lock these regions if they need to be written to in the future.

For 060, 090, and 150 Devices

For device densities 060, 090, and 150, each eNVM block has a user page lock bit (see PAGE_LOCK_SET register) to lock a page and prevent accidental writing. After the page lock is set in eNVM0 for the 060 device or eNVM1 for 090/150 devices, you will not be able to clear the lock for subsequent page updates later.

Application Impact

For Security Devices

There are no workarounds to prevent accidental writing of the protected 4K regions other than ensuring that either the firmware running on the Cortex-M3 or the user logic in the fabric does not accidently write to the eNVM.

For 060, 090, and 150 Devices

The application impact associated with the security devices also applies to the 060, 090, and 150 devices. However, because there are two eNVM blocks on the 090 and 150 devices, an option to place the protected pages in eNVM0 is available for these devices.

Affected Devices

See Appendix: Affected SmartFusion2 and IGLOO2 Devices.

Contact Information

For further clarifications or questions, contact Microsemi's Technical Support at: soc_tech@microsemi.com

Regards,

Microsemi Corporation

Any projected dates in this PCN are based on the most current product information at the time this PCN is being issued, but they may change due to unforeseen circumstances. For the latest schedule and any other information, please contact your local Microsemi Sales Office, the factory contact shown above, or your local distributor.

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Appendix: Affected SmartFusion2 and IGLOO2 Devices

IGLOO2		SmartFusion2	
Leaded Part	**Lead-Free Part**	**Leaded Part**	**Lead-Free Part**
M2GL060-FCS325	M2GL060-FCSG325	M2S060-FCS325	M2S060-FCSG325
M2GL090-FCS325	M2GL090-FCSG325	M2S090-FCS325	M2S090-FCSG325
M2GL060-VF400	M2GL060-VFG400	M2S060-VF400	M2S060-VFG400
M2GL150-FCV484	M2GL150-FCVG484	M2S150-FCV484	M2S150-FCVG484
M2GL060-FG484	M2GL060-FGG484	M2S060-FG484	M2S060-FGG484
M2GL090-FG484	M2GL090-FGG484	M2S090-FG484	M2S090-FGG484
M2GL150-FCS536	M2GL150-FCSG536	M2S150-FCS536	M2S150-FCSG536
M2GL060-FG676	M2GL060-FGG676	M2S060-FG676	M2S060-FGG676
M2GL090-FG676	M2GL090-FGG676	M2S090-FG676	M2S090-FGG676
M2GL150-FC1152	M2GL150-FCG1152	M2S150-FC1152	M2S150-FCG1152
M2GL060T-FCS325	M2GL060T-FCSG325	M2S060T-FCS325	M2S060T-FCSG325
M2GL090T-FCS325	M2GL090T-FCSG325	M2S090T-FCS325	M2S090T-FCSG325
M2GL060T-VF400	M2GL060T-VFG400	M2S060T-VF400	M2S060T-VFG400
M2GL150T-FCV484	M2GL150T-FCVG484	M2S150T-FCV484	M2S150T-FCVG484
M2GL010T-FG484	M2GL010T-FGG484	M2S010T-FG484	M2S010T-FGG484
M2GL060T-FG484	M2GL060T-FGG484	M2S060T-FG484	M2S060T-FGG484
M2GL090T-FG484	M2GL090T-FGG484	M2S090T-FG484	M2S090T-FGG484
M2GL150T-FCS536	M2GL150T-FCSG536	M2S150T-FCS536	M2S150T-FCSG536
M2GL060T-FG676	M2GL060T-FGG676	M2S060T-FG676	M2S060T-FGG676
M2GL090T-FG676	M2GL090T-FGG676	M2S090T-FG676	M2S090T-FGG676
M2GL150T-FC1152	M2GL150T-FCG1152	M2S150T-FC1152	M2S150T-FCG1152
M2GL005S-TQ144	M2GL005S-TQG144	M2S005S-TQ144	M2S005S-TQG144
M2GL010S-TQ144	M2GL010S-TQG144	M2S010S-TQ144	M2S010S-TQG144
M2GL005S-VF256	M2GL005S-VFG256	M2S005S-VF256	M2S005S-VFG256
M2GL005S-VF400	M2GL005S-VFG400	M2S005S-VF400	M2S005S-VFG400
M2GL005S-FG484	M2GL005S-FGG484	M2S005S-FG484	M2S005S-FGG484
M2GL010TS-VF256	M2GL010TS-VFG256	M2S010TS-VF256	M2S010TS-VFG256
M2GL025TS-VF256	M2GL025TS-VFG256	M2S025TS-VF256	M2S025TS-VFG256
M2GL025TS-FCS325	M2GL025TS-FCSG325	M2S025TS-FCS325	M2S025TS-FCSG325
M2GL050TS-FCS325	M2GL050TS-FCSG325	M2S050TS-FCS325	M2S050TS-FCSG325
M2GL060TS-FCS325	M2GL060TS-FCSG325	M2S060TS-FCS325	M2S060TS-FCSG325
M2GL090TS-FCS325	M2GL090TS-FCSG325	M2S090TS-FCS325	M2S090TS-FCSG325
M2GL010TS-VF400	M2GL010TS-VFG400	M2S010TS-VF400	M2S010TS-VFG400
M2GL025TS-VF400	M2GL025TS-VFG400	M2S025TS-VF400	M2S025TS-VFG400
M2GL050TS-VF400	M2GL050TS-VFG400	M2S050TS-VF400	M2S050TS-VFG400
M2GL060TS-VF400	M2GL060TS-VFG400	M2S060TS-VF400	M2S060TS-VFG400
M2GL150TS-FCV484	M2GL150TS-FCVG484	M2S150TS-FCV484	M2S150TS-FCVG484
M2GL010TS-FG484	M2GL010TS-FGG484	M2S010TS-FG484	M2S010TS-FGG484
M2GL025TS-FG484	M2GL025TS-FGG484	M2S025TS-FG484	M2S025TS-FGG484
M2GL050TS-FG484	M2GL050TS-FGG484	M2S050TS-FG484	M2S050TS-FGG484

IGLOO2		SmartFusion2	
Leaded Part	**Lead-Free Part**	**Leaded Part**	**Lead-Free Part**
M2GL060TS-FG484	M2GL060TS-FGG484	M2S060TS-FG484	M2S060TS-FGG484
M2GL090TS-FG484	M2GL090TS-FGG484	M2S090TS-FG484	M2S090TS-FGG484
M2GL150TS-FCS536	M2GL150TS-FCSG536	M2S150TS-FCS536	M2S150TS-FCSG536
M2GL060TS-FG676	M2GL060TS-FGG676	M2S060TS-FG676	M2S060TS-FGG676
M2GL090TS-FG676	M2GL090TS-FGG676	M2S090TS-FG676	M2S090TS-FGG676
M2GL050TS-FG896	M2GL050TS-FGG896	M2S050TS-FG896	M2S050TS-FGG896
M2GL150TS-FC1152	M2GL150TS-FCG1152	M2S150TS-FC1152	M2S150TS-FCG1152
M2GL060-1FCS325	M2GL060-1FCSG325	M2S060-1FCS325	M2S060-1FCSG325
M2GL090-1FCS325	M2GL090-1FCSG325	M2S090-1FCS325	M2S090-1FCSG325
M2GL060-1VF400	M2GL060-1VFG400	M2S060-1VF400	M2S060-1VFG400
M2GL150-1FCV484	M2GL150-1FCVG484	M2S150-1FCV484	M2S150-1FCVG484
M2GL060-1FG484	M2GL060-1FGG484	M2S060-1FG484	M2S060-1FGG484
M2GL090-1FG484	M2GL090-1FGG484	M2S090-1FG484	M2S090-1FGG484
M2GL150-1FCS536	M2GL150-1FCSG536	M2S150-1FCS536	M2S150-1FCSG536
M2GL060-1FG676	M2GL060-1FGG676	M2S060-1FG676	M2S060-1FGG676
M2GL090-1FG676	M2GL090-1FGG676	M2S090-1FG676	M2S090-1FGG676
M2GL150-1FC1152	M2GL150-1FCG1152	M2S150-1FC1152	M2S150-1FCG1152
M2GL060T-1FCS325	M2GL060T-1FCSG325	M2S060T-1FCS325	M2S060T-1FCSG325
M2GL090T-1FCS325	M2GL090T-1FCSG325	M2S090T-1FCS325	M2S090T-1FCSG325
M2GL060T-1VF400	M2GL060T-1VFG400	M2S060T-1VF400	M2S060T-1VFG400
M2GL150T-1FCV484	M2GL150T-1FCVG484	M2S150T-1FCV484	M2S150T-1FCVG484
M2GL060T-1FG484	M2GL060T-1FGG484	M2S060T-1FG484	M2S060T-1FGG484
M2GL090T-1FG484	M2GL090T-1FGG484	M2S090T-1FG484	M2S090T-1FGG484
M2GL150T-1FCS536	M2GL150T-1FCSG536	M2S150T-1FCS536	M2S150T-1FCSG536
M2GL060T-1FG676	M2GL060T-1FGG676	M2S060T-1FG676	M2S060T-1FGG676
M2GL090T-1FG676	M2GL090T-1FGG676	M2S090T-1FG676	M2S090T-1FGG676
M2GL150T-1FC1152	M2GL150T-1FCG1152	M2S150T-1FC1152	M2S150T-1FCG1152
M2GL005S-1TQ144	M2GL005S-1TQG144	M2S005S-1TQ144	M2S005S-1TQG144
M2GL010S-1TQ144	M2GL010S-1TQG144	M2S010S-1TQ144	M2S010S-1TQG144
M2GL005S-1VF256	M2GL005S-1VFG256	M2S005S-1VF256	M2S005S-1VFG256
M2GL005S-1VF400	M2GL005S-1VFG400	M2S005S-1VF400	M2S005S-1VFG400
M2GL005S-1FG484	M2GL005S-1FGG484	M2S005S-1FG484	M2S005S-1FGG484
M2GL010TS-1VF256	M2GL010TS-1VFG256	M2S010TS-1VF256	M2S010TS-1VFG256
M2GL025TS-1VF256	M2GL025TS-1VFG256	M2S025TS-1VF256	M2S025TS-1VFG256
M2GL025TS-1FCS325	M2GL025TS-1FCSG325	M2S025TS-1FCS325	M2S025TS-1FCSG325
M2GL050TS-1FCS325	M2GL050TS-1FCSG325	M2S050TS-1FCS325	M2S050TS-1FCSG325
M2GL060TS-1FCS325	M2GL060TS-1FCSG325	M2S060TS-1FCS325	M2S060TS-1FCSG325
M2GL090TS-1FCS325	M2GL090TS-1FCSG325	M2S090TS-1FCS325	M2S090TS-1FCSG325
M2GL010TS-1VF400	M2GL010TS-1VFG400	M2S010TS-1VF400	M2S010TS-1VFG400
M2GL025TS-1VF400	M2GL025TS-1VFG400	M2S025TS-1VF400	M2S025TS-1VFG400
M2GL050TS-1VF400	M2GL050TS-1VFG400	M2S050TS-1VF400	M2S050TS-1VFG400

IGLOO2		SmartFusion2	
Leaded Part	**Lead-Free Part**	**Leaded Part**	**Lead-Free Part**
M2GL060TS-1VF400	M2GL060TS-1VFG400	M2S060TS-1VF400	M2S060TS-1VFG400
M2GL150TS-1FCV484	M2GL150TS-1FCVG484	M2S150TS-1FCV484	M2S150TS-1FCVG484
M2GL010TS-1FG484	M2GL010TS-1FGG484	M2S010TS-1FG484	M2S010TS-1FGG484
M2GL025TS-1FG484	M2GL025TS-1FGG484	M2S025TS-1FG484	M2S025TS-1FGG484
M2GL050TS-1FG484	M2GL050TS-1FGG484	M2S050TS-1FG484	M2S050TS-1FGG484
M2GL060TS-1FG484	M2GL060TS-1FGG484	M2S060TS-1FG484	M2S060TS-1FGG484
M2GL090TS-1FG484	M2GL090TS-1FGG484	M2S090TS-1FG484	M2S090TS-1FGG484
M2GL150TS-1FCS536	M2GL150TS-1FCSG536	M2S150TS-1FCS536	M2S150TS-1FCSG536
M2GL060TS-1FG676	M2GL060TS-1FGG676	M2S060TS-1FG676	M2S060TS-1FGG676
M2GL090TS-1FG676	M2GL090TS-1FGG676	M2S090TS-1FG676	M2S090TS-1FGG676
M2GL050TS-1FG896	M2GL050TS-1FGG896	M2S050TS-1FG896	M2S050TS-1FGG896
M2GL150TS-1FC1152	M2GL150TS-1FCG1152	M2S150TS-1FC1152	M2S150TS-1FCG1152
M2GL060-FCS325I	M2GL060-FCSG325I	M2S060-FCS325I	M2S060-FCSG325I
M2GL090-FCS325I	M2GL090-FCSG325I	M2S090-FCS325I	M2S090-FCSG325I
M2GL060-VF400I	M2GL060-VFG400I	M2S060-VF400I	M2S060-VFG400I
M2GL150-FCV484I	M2GL150-FCVG484I	M2S150-FCV484I	M2S150-FCVG484I
M2GL060-FG484I	M2GL060-FGG484I	M2S060-FG484I	M2S060-FGG484I
M2GL090-FG484I	M2GL090-FGG484I	M2S090-FG484I	M2S090-FGG484I
M2GL150-FCS536I	M2GL150-FCSG536I	M2S150-FCS536I	M2S150-FCSG536I
M2GL060-FG676I	M2GL060-FGG676I	M2S060-FG676I	M2S060-FGG676I
M2GL090-FG676I	M2GL090-FGG676I	M2S090-FG676I	M2S090-FGG676I
M2GL150-FC1152I	M2GL150-FCG1152I	M2S150-FC1152I	M2S150-FCG1152I
M2GL060T-FCS325I	M2GL060T-FCSG325I	M2S060T-FCS325I	M2S060T-FCSG325I
M2GL090T-FCS325I	M2GL090T-FCSG325I	M2S090T-FCS325I	M2S090T-FCSG325I
M2GL060T-VF400I	M2GL060T-VFG400I	M2S060T-VF400I	M2S060T-VFG400I
M2GL150T-FCV484I	M2GL150T-FCVG484I	M2S150T-FCV484I	M2S150T-FCVG484I
M2GL060T-FG484I	M2GL060T-FGG484I	M2S060T-FG484I	M2S060T-FGG484I
M2GL090T-FG484I	M2GL090T-FGG484I	M2S090T-FG484I	M2S090T-FGG484I
M2GL150T-FCS536I	M2GL150T-FCSG536I	M2S150T-FCS536I	M2S150T-FCSG536I
M2GL060T-FG676I	M2GL060T-FGG676I	M2S060T-FG676I	M2S060T-FGG676I
M2GL090T-FG676I	M2GL090T-FGG676I	M2S090T-FG676I	M2S090T-FGG676I
M2GL150T-FC1152I	M2GL150T-FCG1152I	M2S150T-FC1152I	M2S150T-FCG1152I
M2GL005S-TQ144I	M2GL005S-TQG144I	M2S005S-TQ144I	M2S005S-TQG144I
M2GL010S-TQ144I	M2GL010S-TQG144I	M2S010S-TQ144I	M2S010S-TQG144I
M2GL005S-VF256I	M2GL005S-VFG256I	M2S005S-VF256I	M2S005S-VFG256I
M2GL005S-VF400I	M2GL005S-VFG400I	M2S005S-VF400I	M2S005S-VFG400I
M2GL005S-FG484I	M2GL005S-FGG484I	M2S005S-FG484I	M2S005S-FGG484I
M2GL010TS-VF256I	M2GL010TS-VFG256I	M2S010TS-VF256I	M2S010TS-VFG256I
M2GL025TS-VF256I	M2GL025TS-VFG256I	M2S025TS-VF256I	M2S025TS-VFG256I
M2GL025TS-FCS325I	M2GL025TS-FCSG325I	M2S025TS-FCS325I	M2S025TS-FCSG325I
M2GL050TS-FCS325I	M2GL050TS-FCSG325I	M2S050TS-FCS325I	M2S050TS-FCSG325I

IGLOO2		SmartFusion2	
Leaded Part	**Lead-Free Part**	**Leaded Part**	**Lead-Free Part**
M2GL060TS-FCS325I	M2GL060TS-FCSG325I	M2S060TS-FCS325I	M2S060TS-FCSG325I
M2GL090TS-FCS325I	M2GL090TS-FCSG325I	M2S090TS-FCS325I	M2S090TS-FCSG325I
M2GL010TS-VF400I	M2GL010TS-VFG400I	M2S010TS-VF400I	M2S010TS-VFG400I
M2GL025TS-VF400I	M2GL025TS-VFG400I	M2S025TS-VF400I	M2S025TS-VFG400I
M2GL050TS-VF400I	M2GL050TS-VFG400I	M2S050TS-VF400I	M2S050TS-VFG400I
M2GL060TS-VF400I	M2GL060TS-VFG400I	M2S060TS-VF400I	M2S060TS-VFG400I
M2GL150TS-FCV484I	M2GL150TS-FCVG484I	M2S150TS-FCV484I	M2S150TS-FCVG484I
M2GL010TS-FG484I	M2GL010TS-FGG484I	M2S010TS-FG484I	M2S010TS-FGG484I
M2GL025TS-FG484I	M2GL025TS-FGG484I	M2S025TS-FG484I	M2S025TS-FGG484I
M2GL050TS-FG484I	M2GL050TS-FGG484I	M2S050TS-FG484I	M2S050TS-FGG484I
M2GL060TS-FG484I	M2GL060TS-FGG484I	M2S060TS-FG484I	M2S060TS-FGG484I
M2GL090TS-FG484I	M2GL090TS-FGG484I	M2S090TS-FG484I	M2S090TS-FGG484I
M2GL150TS-FCS536I	M2GL150TS-FCSG536I	M2S150TS-FCS536I	M2S150TS-FCSG536I
M2GL060TS-FG676I	M2GL060TS-FGG676I	M2S060TS-FG676I	M2S060TS-FGG676I
M2GL090TS-FG676I	M2GL090TS-FGG676I	M2S090TS-FG676I	M2S090TS-FGG676I
M2GL050TS-FG896I	M2GL050TS-FGG896I	M2S050TS-FG896I	M2S050TS-FGG896I
M2GL150TS-FC1152I	M2GL150TS-FCG1152I	M2S150TS-FC1152I	M2S150TS-FCG1152I
M2GL060-1FCS325I	M2GL060-1FCSG325I	M2S060-1FCS325I	M2S060-1FCSG325I
M2GL090-1FCS325I	M2GL090-1FCSG325I	M2S090-1FCS325I	M2S090-1FCSG325I
M2GL060-1VF400I	M2GL060-1VFG400I	M2S060-1VF400I	M2S060-1VFG400I
M2GL150-1FCV484I	M2GL150-1FCVG484I	M2S150-1FCV484I	M2S150-1FCVG484I
M2GL060-1FG484I	M2GL060-1FGG484I	M2S060-1FG484I	M2S060-1FGG484I
M2GL090-1FG484I	M2GL090-1FGG484I	M2S090-1FG484I	M2S090-1FGG484I
M2GL150-1FCS536I	M2GL150-1FCSG536I	M2S150-1FCS536I	M2S150-1FCSG536I
M2GL060-1FG676I	M2GL060-1FGG676I	M2S060-1FG676I	M2S060-1FGG676I
M2GL090-1FG676I	M2GL090-1FGG676I	M2S090-1FG676I	M2S090-1FGG676I
M2GL150-1FC1152I	M2GL150-1FCG1152I	M2S150-1FC1152I	M2S150-1FCG1152I
M2GL060T-1FCS325I	M2GL060T-1FCSG325I	M2S060T-1FCS325I	M2S060T-1FCSG325I
M2GL090T-1FCS325I	M2GL090T-1FCSG325I	M2S090T-1FCS325I	M2S090T-1FCSG325I
M2GL060T-1VF400I	M2GL060T-1VFG400I	M2S060T-1VF400I	M2S060T-1VFG400I
M2GL150T-1FCV484I	M2GL150T-1FCVG484I	M2S150T-1FCV484I	M2S150T-1FCVG484I
M2GL060T-1FG484I	M2GL060T-1FGG484I	M2S060T-1FG484I	M2S060T-1FGG484I
M2GL090T-1FG484I	M2GL090T-1FGG484I	M2S090T-1FG484I	M2S090T-1FGG484I
M2GL150T-1FCS536I	M2GL150T-1FCSG536I	M2S150T-1FCS536I	M2S150T-1FCSG536I
M2GL060T-1FG676I	M2GL060T-1FGG676I	M2S060T-1FG676I	M2S060T-1FGG676I
M2GL090T-1FG676I	M2GL090T-1FGG676I	M2S090T-1FG676I	M2S090T-1FGG676I
M2GL150T-1FC1152I	M2GL150T-1FCG1152I	M2S150T-1FC1152I	M2S150T-1FCG1152I
M2GL005S-1TQ144I	M2GL005S-1TQG144I	M2S005S-1TQ144I	M2S005S-1TQG144I
M2GL010S-1TQ144I	M2GL010S-1TQG144I	M2S010S-1TQ144I	M2S010S-1TQG144I
M2GL005S-1VF256I	M2GL005S-1VFG256I	M2S005S-1VF256I	M2S005S-1VFG256I
M2GL005S-1VF400I	M2GL005S-1VFG400I	M2S005S-1VF400I	M2S005S-1VFG400I

IGLOO2		SmartFusion2	
Leaded Part	**Lead-Free Part**	**Leaded Part**	**Lead-Free Part**
M2GL005S-1FG484I	M2GL005S-1FGG484I	M2S005S-1FG484I	M2S005S-1FGG484I
M2GL010TS-1VF256I	M2GL010TS-1VFG256I	M2S010TS-1VF256I	M2S010TS-1VFG256I
M2GL025TS-1VF256I	M2GL025TS-1VFG256I	M2S025TS-1VF256I	M2S025TS-1VFG256I
M2GL025TS-1FCS325I	M2GL025TS-1FCSG325I	M2S025TS-1FCS325I	M2S025TS-1FCSG325I
M2GL050TS-1FCS325I	M2GL050TS-1FCSG325I	M2S050TS-1FCS325I	M2S050TS-1FCSG325I
M2GL060TS-1FCS325I	M2GL060TS-1FCSG325I	M2S060TS-1FCS325I	M2S060TS-1FCSG325I
M2GL090TS-1FCS325I	M2GL090TS-1FCSG325I	M2S090TS-1FCS325I	M2S090TS-1FCSG325I
M2GL010TS-1VF400I	M2GL010TS-1VFG400I	M2S010TS-1VF400I	M2S010TS-1VFG400I
M2GL025TS-1VF400I	M2GL025TS-1VFG400I	M2S025TS-1VF400I	M2S025TS-1VFG400I
M2GL050TS-1VF400I	M2GL050TS-1VFG400I	M2S050TS-1VF400I	M2S050TS-1VFG400I
M2GL060TS-1VF400I	M2GL060TS-1VFG400I	M2S060TS-1VF400I	M2S060TS-1VFG400I
M2GL150TS-1FCV484I	M2GL150TS-1FCVG484I	M2S150TS-1FCV484I	M2S150TS-1FCVG484I
M2GL010TS-1FG484I	M2GL010TS-1FGG484I	M2S010TS-1FG484I	M2S010TS-1FGG484I
M2GL025TS-1FG484I	M2GL025TS-1FGG484I	M2S025TS-1FG484I	M2S025TS-1FGG484I
M2GL050TS-1FG484I	M2GL050TS-1FGG484I	M2S050TS-1FG484I	M2S050TS-1FGG484I
M2GL060TS-1FG484I	M2GL060TS-1FGG484I	M2S060TS-1FG484I	M2S060TS-1FGG484I
M2GL090TS-1FG484I	M2GL090TS-1FGG484I	M2S090TS-1FG484I	M2S090TS-1FGG484I
M2GL150TS-1FCS536I	M2GL150TS-1FCSG536I	M2S150TS-1FCS536I	M2S150TS-1FCSG536I
M2GL060TS-1FG676I	M2GL060TS-1FGG676I	M2S060TS-1FG676I	M2S060TS-1FGG676I
M2GL090TS-1FG676I	M2GL090TS-1FGG676I	M2S090TS-1FG676I	M2S090TS-1FGG676I
M2GL050TS-1FG896I	M2GL050TS-1FGG896I	M2S050TS-1FG896I	M2S050TS-1FGG896I
M2GL150TS-1FC1152I	M2GL150TS-1FCG1152I	M2S150TS-1FC1152I	M2S150TS-1FCG1152I
M2GL060T-1FG484M	M2GL060T-1FGG484M	M2S060T-1FG484M	M2S060T-1FGG484M
M2GL090T-1FG484M	M2GL090T-1FGG484M	M2S090T-1FG484M	M2S090T-1FGG484M
M2GL150T-1FC1152M	M2GL150T-1FCG1152M	M2S150T-1FC1152M	M2S150T-1FCG1152M
M2GL010TS-1FG484M	M2GL010TS-1FGG484M	M2S010TS-1FG484M	M2S010TS-1FGG484M
M2GL025TS-1FG484M	M2GL025TS-1FGG484M	M2S025TS-1FG484M	M2S025TS-1FGG484M
M2GL050TS-1FG484M	M2GL050TS-1FGG484M	M2S050TS-1FG484M	M2S050TS-1FGG484M
M2GL060TS-1FG484M	M2GL060TS-1FGG484M	M2S060TS-1FG484M	M2S060TS-1FGG484M
M2GL090TS-1FG484M	M2GL090TS-1FGG484M	M2S090TS-1FG484M	M2S090TS-1FGG484M
M2GL150TS-1FC1152M	M2GL150TS-1FCG1152M	M2S150TS-1FC1152M	M2S150TS-1FCG1152M
	M2GL060-1FGG484T1		M2S005S-1FGG484T2
	M2GL090-1FGG484T1		M2S010TS-1FGG484T2
	M2GL005S-1FGG484T2		M2S025TS-1FGG484T2
	M2GL010TS-1FGG484T2		M2S060TS-1FGG484T2
	M2GL025TS-1FGG484T2		M2S090TS-1FGG484T2
	M2GL060TS-1FGG484T2		M2S005S-1VFG256T2
	M2GL090TS-1FGG484T2		M2S010TS-1VFG256T2
	M2GL005S-1VFG256T2		M2S025TS-1VFG256T2
	M2GL010TS-1VFG256T2		M2S005S-1VFG400T2

IGLOO2		SmartFusion2	
Leaded Part	**Lead-Free Part**	**Leaded Part**	**Lead-Free Part**
	M2GL025TS-1VFG256T2		M2S010TS-1VFG400T2
	M2GL005S-1VFG400T2		M2S025TS-1VFG400T2
	M2GL010TS-1VFG400T2		M2S060TS-1VFG400T2
	M2GL025TS-1VFG400T2		M2S060TS-1FGG676T2
	M2GL060TS-1VFG400T2		M2S090TS-1FGG676T2
	M2GL060TS-1FGG676T2		
	M2GL090TS-1FGG676T2		



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