

Inform

ECN Overview

D323x-S

Industrial Mainboards

ECN-No. SBOEM-D323x-181214

Reason for ECN:

- Updated LAN Firmware for second LAN Controller i210 (D3231-S / D3236-S)
- Improved circuitry for Pericom PCI Bridge

See following pages for details!

Current Part No. / Revision	New Part No. / Revision
D3231-S11 / GS2	D3231-S11 / GS3
D3235-S13 / GS2	D3235-S13 / GS3
D3236-S13 / GS2	D3236-S13 / GS3

Shipping details: Shipment of the new HW revision starts from February 2015

Released Operating Systems:

Mainboard Version	Win XP32/64	Win Vista	Win 7-32	Win 7-64	Win 8	Win 8.1-32	Win 8.1-64	Windows Server 2008 R2 (64)	Windows Server 2012 R2 (64)
D3231-S	---		X	X	---	---	X	--- 1)	--- 1)
D3235-S	---		X	X	---	---	X	X	X
D3236-S	---	---	X	X	---	---	X	X	X

1) Windows Server OS not tested and released on D3231-S, but due to compatibility to D3236-S no issues expected!

Intel highly recommends to use the latest released drivers when installing the "Haswell Refresh" processors. These updated drivers are compatible with the previous "Haswell" processor series!

ftp://ftp.ts.fujitsu.com/pub/Mainboard-OEM-Sales/Products/Mainboards/Industrial&ExtendedLifetime/D323x-S/Drivers_D323x-S/

Industrial Mainboards D3231-S / D3235-S:

Mainboard	Version	Features	Reason for ECN	ECN Date
D3231-S	D3231-S11 GS1	iQ87 µATX	Initial Launch	10/2013
	D3231-S11 GS2		Provisions to enable support for "Haswell Refresh" processors: - Update BIOS to R1.18.0 ¹⁾ - Update Management Engine Firmware (Intel ME) from version 9.0.x.x. to version 9.1.x.x ²⁾ Minor hardware adjustments: - Adjust 3 resistors of the onboard core voltage regulator to improve the margin during processor load steps - Adjust one resistor (Reset line of PCIe x16) in order to improve the acceptance of non-compliant PCIe devices	04/2014
	D3231-S11 GS3		- Improved LAN firmware (V0.83) for i210 LAN controller. ³⁾ - Improved circuitry for Pericom PCI Bridge (Supply voltage adjusted; prevents possible initialization issue @ very low operating temperature) - BIOS ≥ R1.24.0 recommended	12/2014
D3235-S	D3235-S13 GS1	iH81 ATX	Initial Launch	12/2013
	D3235-S13 GS2		See D3231-S11 GS2	04/2014
	D3235-S13 GS3		- Improved circuitry for Pericom PCI Bridge (Supply voltage adjusted; prevents possible initialization issue @ very low operating temperature) - BIOS ≥ R1.24.0 recommended	12/2014

- 1) Note: BIOS downgrade to any version < R1.18.0 is NOT possible!
- 2) Update of the ME firmware is NOT possible during standard BIOS update from any previous version to R1.18.0.
 Mainboard D323x-S GS2 shipped ex factory include the updated BIOS ≥ R1.18.0 and the updated ME firmware version 9.1.x.x
 In order to upgrade BIOS and ME firmware of D323x-S GS1 mainboards, please follow these steps:
 - Make sure to have no Haswell Refresh processor installed
 - Update BIOS to **R1.18.0** first
 - Install Service Release BIOS **R1.18.0.SR1** (ME firmware will be updated to version 9.1.x.x)
[ftp://ftp.ts.fujitsu.com/pub/Mainboard-OEM-Sales/Products/Mainboards/Industrial&ExtendedLifetime/D323x-S/BIOS_D323x-S/](http://ftp.ts.fujitsu.com/pub/Mainboard-OEM-Sales/Products/Mainboards/Industrial&ExtendedLifetime/D323x-S/BIOS_D323x-S/)
 Note: BIOS update may take some while before indicating any progress – just be patient!
 - Haswell Refresh processor can be installed now
- 3) Possible sporadic issue with previous LAN firmware:
 Second LAN not found (LAN not visible in PCI configuration space; LAN not visible in Windows device manager).
 Updated firmware prevents LAN-internal PLLs from not starting correctly.
 Further change: Setting for "Serial Number Capability" changed to *disabled*.
 Result: When swapping the mainboard, windows does not detect a new LAN connection → Previous LAN settings like IP are kept.
 Note: For the first LAN controller (i217) "Serial Number Capability" was already set to *disabled*.

Industrial Mainboards D3236-S:

Mainboard	Version	Features	Reason for ECN	ECN Date
D3236-S	D3236-S13 GS1	iQ87 ATX	Initial Launch	10/2013
	D3236-S13 GS2		Provisions to enable support for "Haswell Refresh" processors: - Update BIOS to R1.18.0 ¹⁾ - Update Management Engine Firmware (Intel ME) from version 9.0.x.x. to version 9.1.x.x ²⁾ Minor hardware adjustments: - Adjust 3 resistors of the onboard core voltage regulator to improve the margin during processor load steps - Adjust one resistor (Reset line of PCIe x16) in order to improve the acceptance of non-compliant PCIe devcies	04/2014
	D3236-S13 GS3		- Improved LAN firmware (V0.83) for i210 LAN controller. ³⁾ - Improved circuitry for Pericom PCI Bridge (Supply voltage adjusted; prevents possible initialization issue @ very low operating temperature) - BIOS ≥ R1.24.0 recommended	12/2014

- Note: BIOS downgrade to any version < R1.18.0 is NOT possible!
- Update of the ME firmware is NOT possible during standard BIOS update from any previous version to R1.18.0.
 Mainboard D323x-S GS2 shipped ex factory include the updated BIOS ≥ R1.18.0 and the updated ME firmware version 9.1.x.x
 In order to upgrade BIOS and ME firmware of D323x-S GS1 mainboards, please follow these steps:
 - Make sure to have no Haswell Refresh processor installed
 - Update BIOS to **R1.18.0** first
 - Install Service Release BIOS **R1.18.0.SR1** (ME firmware will be updated to version 9.1.x.x)
ftp://ftp.ts.fujitsu.com/pub/Mainboard-OEM-Sales/Products/Mainboards/Industrial&ExtendedLifetime/D323x-S/BIOS_D323x-S/
 Note: BIOS update may take some while before indicating any progress – just be patient!
 - Haswell Refresh processor can be installed now
- Possible sporadic issue with previous LAN firmware:
 Second LAN not found (LAN not visible in PCI configuration space; LAN not visible in Windows device manager).
 Updated firmware prevents LAN-internal PLLs from not starting correctly.
 Further change: Setting for "Serial Number Capability" changed to *disabled*.
 Result: When swapping the mainboard, windows does not detect a new LAN connection → Previous LAN settings like IP are kept.
 Note: For the first LAN controller (i217) "Serial Number Capability" was already set to *disabled*.

Date	Revision Overview
12/2014	ECN D3231-S11 / D3235-S13 / D3236-S13 GS2 → GS3
04/2014	ECN D3231-S11 / D3235-S13 / D3236-S13 GS1 → GS2

Published by department
 Systemboard OEM Sales

OEM FTP
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<http://www.fujitsu.com/fts/products/computing/pc/accessories/mainboards/>

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