



Future Technology Devices International Ltd.

TN_159 FT90x Errata Technical Note

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The intention of this errata technical note is to give a detailed description of known functional or electrical issues with the FTDI FT90X series device.

The current revision of the FT90X series is **Revision B, released February 2015.**

Use of FTDI devices in life support and/or safety applications is entirely at the user's risk, and the user agrees to defend, indemnify and hold FTDI harmless from any and all damages, claims, suits or expense resulting from such use.

Future Technology Devices International Limited (FTDI)

Unit1, 2 Seaward Place, Centurion Business Park, Glasgow G41 1HH United Kingdom

Tel.: +44 (0) 141 429 2777 Fax: + 44 (0) 141 429 2758

E-Mail (Support): support1@ftdichip.com Web: <http://www.ftdichip.com>

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1 FT90x Revision

FT90x part numbers are listed in **Table 1**. The letter at the end of date code identifies the device revision.

The current revision of the FT90x series is **revision B, released Feb 2015**. At the time of releasing this Technical Note there is a known issue with this silicon revision.

Part Number	Package
FT900Q/FT901Q/FT902Q/FT903Q	100-pin QFN
FT900L/FT901L/FT902L/FT903L	100-pin LQFP
FT905Q/FT906Q/FT907Q/FT908Q	76-pin QFN
FT905L/FT906L/FT907L/FT908L	80-pin LQFP

Table 1 FT90x Part Numbers

This errata technical note covers the revisions of FT90X listed in **Table 2**.

Revision	Notes
A	First device revision. Engineering Samples.
B	Second device revision. Launched Feb 2015

Table 2 FT90x Series Revisions

2 Errata History Table – Functional Errata

Functional Errata	Short description	Errata occurs in device revision
-	No known issues	-

Table 3 Functional Errata

2.1 Errata History Table – Electrical and Timing Specification Deviations.

Deviations	Short description	Errata occurs in device revision
FSOURCE pin has issue	It doesn't meet with the design specification.	B

Table 4 Electrical and Timing Errata

3 Electrical Specification Deviation Errata of FT90x

3.1 Revision B

3.1.1 FSOURCE Pin issue

Introduction:

The FT90x series has dedicated VPP and FSOURCE input pins as 64-bit EFUSE program source inputs. The function of VPP and FSOURCE pins provide the program indicate voltage (VPP = +1.85V, FSOURCE = +3.70V Typical) while 64-bit EFUSE burnt on-going. Otherwise, keeps FSOURCE pin floating or tiers to ground for EFUSE read operation or standby mode.

Issue:

The FSOURCE pin has an issue that it doesn't support EFUSE programming on the FT90x series Revision B.

Workaround:

There is no workaround for this revision, will try to be fixed on next version.

Hardware reference design:

- 1) No need change any PCB design. Keep original design for next fixed version to drop-in.

Package specific:

The effected packages are listed in Table 5.

Package	Applicable (Yes/No)
FT900Q/FT901Q/FT902Q/FT903Q	Yes
FT900L/FT901L/FT902L/FT903L	Yes
FT905Q/FT906Q/FT907Q/FT908Q	Yes
FT905L/FT906L/FT907L/FT908L	Yes

Table 5

4 FT90x Series Package Markings

FT90x is available in a RoHS Compliant package, 100-pin QFN, 100-pin LQFP, 76-pin QFN and 80-pin LQFP. An example of the markings on the package is shown in the figures below.

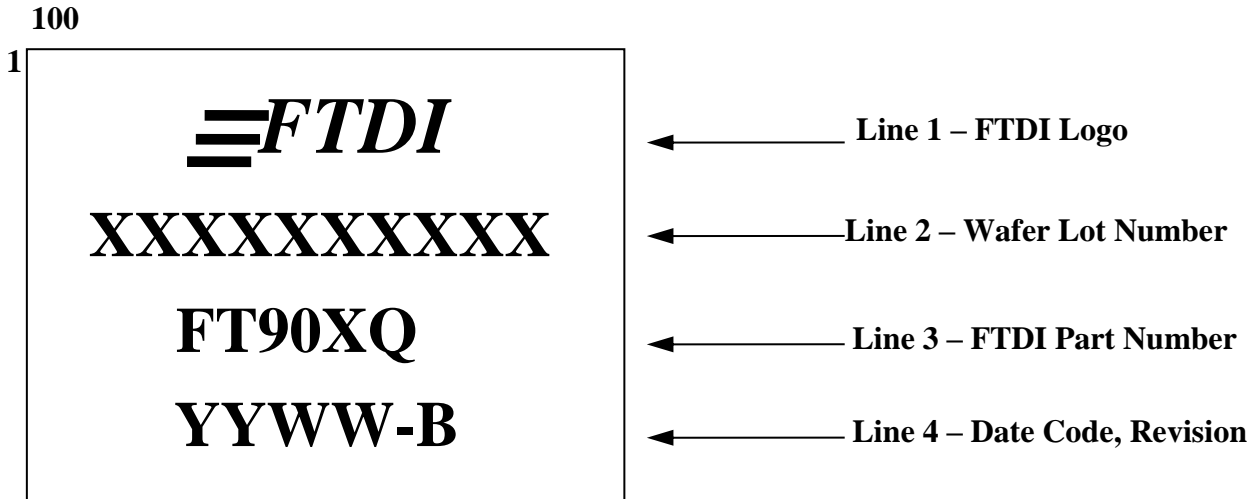


Figure 1 Package Markings – FT90XQ 100-pin

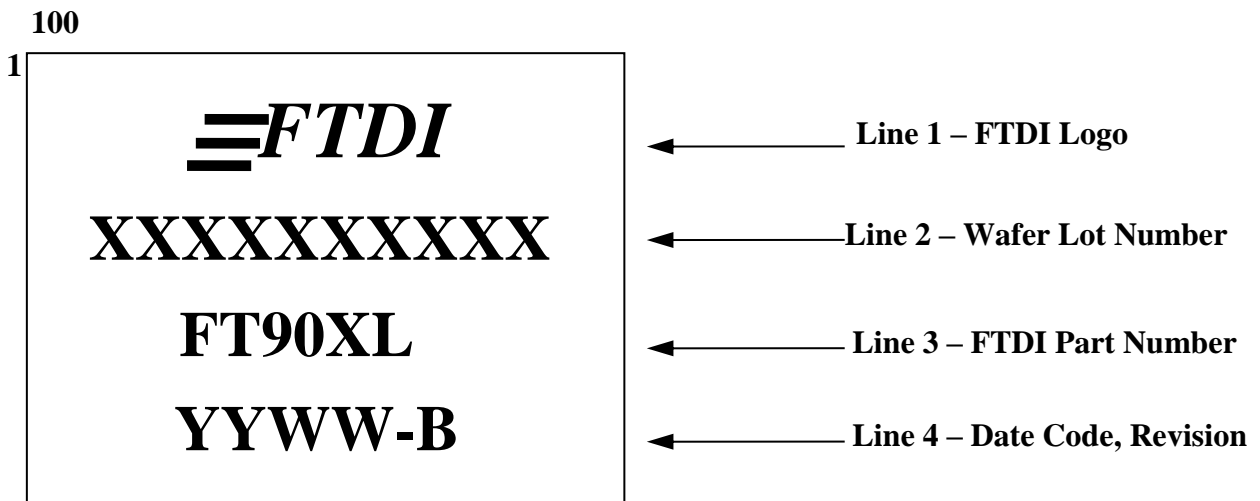


Figure 2 Package Markings – FT90XL 100-pin

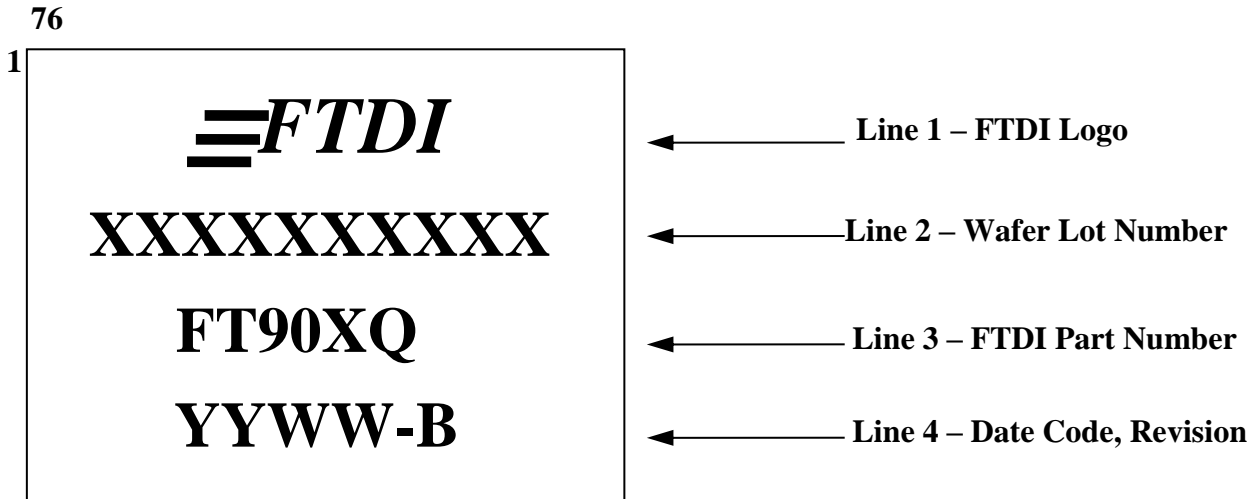


Figure 3 Package Markings – FT90XQ 76-pin

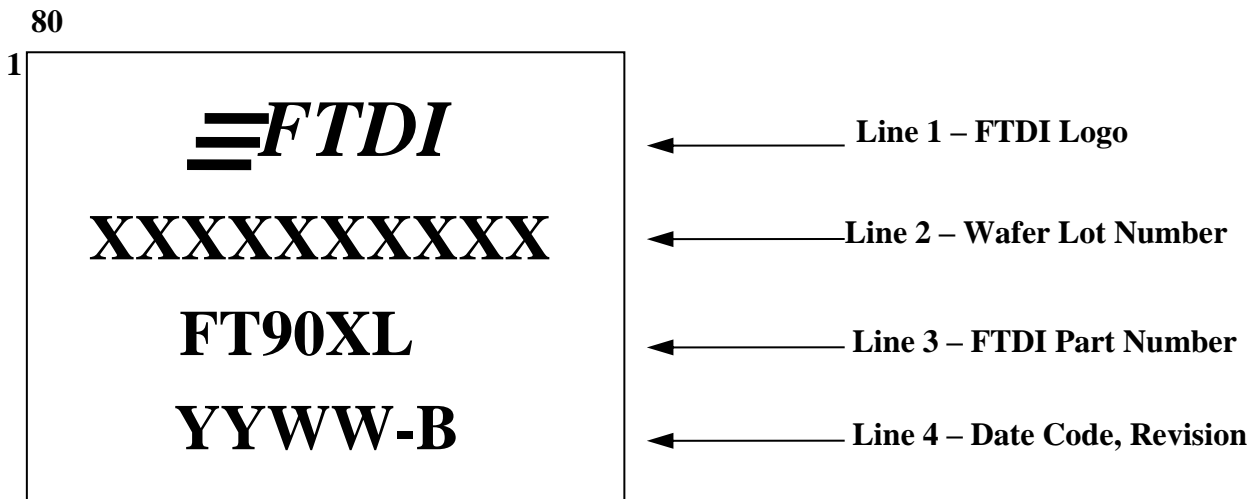


Figure 4 Package Markings – FT90XL 80-pin

The date code format is **YYWW** where WW = 2 digit week number, YY = 2 digit year number. This is followed by the revision number.

5 Contact Information

Head Office – Glasgow, UK

Future Technology Devices International Limited
Unit 1, 2 Seaward Place, Centurion Business Park
Glasgow G41 1HH
United Kingdom
Tel: +44 (0) 141 429 2777
Fax: +44 (0) 141 429 2758

E-mail (Sales) sales1@ftdichip.com
E-mail (Support) support1@ftdichip.com
E-mail (General Enquiries) admin1@ftdichip.com

Branch Office – Tigard, Oregon, USA

Future Technology Devices International Limited
(USA)
7130 SW Fir Loop
Tigard, OR 97223
USA
Tel: +1 (503) 547 0988
Fax: +1 (503) 547 0987

E-Mail (Sales) us.sales@ftdichip.com
E-Mail (Support) us.support@ftdichip.com
E-Mail (General Enquiries) us.admin@ftdichip.com

Branch Office – Taipei, Taiwan

Future Technology Devices International Limited
(Taiwan)
2F, No. 516, Sec. 1, NeiHu Road
Taipei 114
Taiwan, R.O.C.
Tel: +886 (0) 2 8791 3570
Fax: +886 (0) 2 8791 3576

E-mail (Sales) tw.sales1@ftdichip.com
E-mail (Support) tw.support1@ftdichip.com
E-mail (General Enquiries) tw.admin1@ftdichip.com

Branch Office – Shanghai, China

Future Technology Devices International Limited
(China)
Room 1103, No.666 West Huaihai Road,
Shanghai, 200052
China
Tel: +86 21 62351596
Fax: +86 21 62351595

E-mail (Sales) cn.sales@ftdichip.com
E-mail (Support) cn.support@ftdichip.com
E-mail (General Enquiries) cn.admin@ftdichip.com

Web Site

<http://ftdichip.com>

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Appendix B – Revision History

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1.0	Initial Release	2015-10-13