

Future Technology Devices International Ltd

US232B Datasheet

US232B Evaluation Cable for FT232B

The US232 evaluation cable can be used for testing the functionality of the FT232B* USB UART device and drivers prior to design-in. The electronics are housed in an attractive translucent blue enclosure with a matching 1m clear translucent cable.

The US232 evaluation cable has driver support as per section 1.1.

- Data transfer rates from 300 baud to 460,800 baud
- Internal 128-byte TX buffer and 384-byte RX buffer
- Standard DB-9/M RS232 connector
- Full Modem Support Signal Set
- Hardware assisted RTS/CTS, DSR/DTR, and X-On/ X-Off handshaking options
- Transmit and Receive LED Indicators
- Integral 10cm or 1m USB Cable
- Works with USB 1.1, USB 2.0 and USB 3.0 Host Controllers
- Full-Speed USB data transfer rates
- USB No IRQ or DMA resources required
- Remote Wakeup Capable
- Uses FTDI's FT232BM USB UART IC
- Powered from USB no external power adapter required

*The FT232B is the 2nd generation of FTDI's popular USB UART device and the FT232BL is a lead-free version of the FT232BM.

Note that this series is now under <u>EOL</u> and is not recommended for new designs If there is any demand, please send in your enquiry for special support consideration or consider using a more recent FTDI RS232 cable:

https://ftdichip.com/product-category/products/cables/?series_products=57

Neither the whole nor any part of the information contained in, or the product described in this manual, may be adapted, or reproduced in any material or electronic form without the prior written consent of the copyright holder. This product and its documentation are supplied on an as-is basis and no warranty as to their suitability for any particular purpose is either made or implied. Future Technology Devices International Ltd will not accept any claim for damages howsoever arising as a result of use or failure of this product. Your statutory rights are not affected. This product or any variant of it is not intended for use in any medical appliance, device, or system in which the failure of the product might reasonably be expected to result in personal injury. This document provides preliminary information that may be subject to change without notice. No freedom to use patents or other intellectual property rights is implied by the publication of this document. Future Technology Devices International Ltd, Unit 1, 2 Seaward Place, Centurion Business Park, Glasgow, G41 1HH, United Kingdom.





1 Typical Applications

- Modems
- ISDN Terminal Adapters
- Serial PDA Interfacing
- Digital Cameras
- Smart Card Readers

- Terminals
- Serial Printers
- Serial Point of Sales (POS) devices
- Industrial Control Devices
- RS232 Peripheral Upgrades

1.1 Driver Support

Royalty free VIRTUAL COM PORT (VCP) and D2XX Direct Drivers are available for the following Operating Systems (OS):

- Windows
- Linux
- Mac
- Android (J2xx / D2xx only)

See the following website link for the full driver support list including OS versions and legacy OS.

https://ftdichip.com/drivers/

Virtual COM Port (VCP) drivers cause the USB device to appear as an additional COM port available to the PC. Application software can access the USB device in the same way as it would access a standard COM port.

D2XX Direct Drivers allow direct access to the USB device through a DLL. Application software can access the USB device through a series of DLL function calls. The functions available are listed in the D2XX Programmer's Guide document which is available from the Documents section of our website.

Please also refer to the Installation Guides webpage for details on how to install the drivers.

1.2 Part Numbers

Part Number	Description
US232B/LC	RS232 cable 10cm length
US232B-100	RS232 cable 1m length

Note: Shipment might be in bulk/blister package with -BULK or -BLISTER added to the part number.



Table of Contents

1 Typical Applications	2
1.1 Driver Support	2
1.2 Part Numbers	2
2 Reference Design	4
2.1 Connection Pinout	4
3 Contact Information	5
Appendix A – References	6
Document References	6
Acronyms and Abbreviations	6
Appendix B – List of Tables and Figures	7
List of Tables	7
List of Figures	7
Appendix C – Revision History	8

3



2 Reference Design

For manufacturers who are interested in making this product for themselves either with our enclosure or one of their own design, we can supply you with the US232B reference design free of charge. This consists of schematics, bill of materials and the PCB design in Gerber format.

These files can be downloaded from our old website:

- PCB Gerber files
- <u>Schematic (PDF format)</u>
- Top PCB layer (PDF format)
- Bottom PCB layer (PDF format)

2.1 Connection Pinout

Here is the standard RS232 connection pinout:

DB9 Pin No.	Name	Туре	Description	
1	DCD	Input	Data Carrier Detect control input	
2	RXDATA	Input	Receive Asynchronous Data input.	
3	TXDATA	Output	Transmit Asynchronous Data output.	
4	DTR	Output	Data Terminal Ready control output / Handshake signal	
5	GND	Gnd	Device ground supply pin.	
6	DSR	Input	Data Set Ready control input / Handshake signal	
7	RTS	Output	Request To Send Control Output / Handshake signal	
8	CTS	Input	Clear to Send Control input / Handshake signal.	
9	RI	Input	Ring Indicator control input. When remote wakeup is enabled in the FT232RL's internal EEPROM taking RI# low can be used to resume the PC USB host controller from suspend.	

Table 1 Connection Pinout



3 Contact Information

Head Office – Glasgow, UK

Future Technology Devices International Limited (UK) 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) E-mail (Support) E-mail (General Enquiries)

sales1@ftdichip.com support1@ftdichip.com admin1@ftdichip.com

Branch Office - Tigard, Oregon, USA

Future Technology Devices International Limited (USA) 7130 SW Fir Loop Tigard, OR 97223-8160 USA Tel: +1 (503) 547 0988 Fax: +1 (503) 547 0987

Future Technology Devices International Limited (China)

E-mail (Sales) E-mail (Support) E-mail (General Enquiries)

Branch Office – Shanghai, China

Room 1103, No. 666 West Huaihai Road,

us.sales@ftdichip.com us.support@ftdichip.com 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 8797 1330 Fax: +886 (0) 2 8751 9737

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

Tel: +86 (21) 62351596

Fax: +86 (21) 62351595

Shanghai, 200052

China

cn.sales@ftdichip.com cn.support@ftdichip.com cn.admin@ftdichip.com

Web Site

http://ftdichip.com

Distributor and Sales Representatives

Please visit the Sales Network page of the <u>FTDI Web site</u> for the contact details of our distributor(s) and sales representative(s) in your country.

System and equipment manufacturers and designers are responsible to ensure that their systems, and any Future Technology Devices International Ltd (FTDI) devices incorporated in their systems, meet all applicable safety, regulatory and system-level performance requirements. All application-related information in this document (including application descriptions, suggested FTDI devices and other materials) is provided for reference only. While FTDI has taken care to assure it is accurate, this information is subject to customer confirmation, and FTDI disclaims all liability for system designs and for any applications assistance provided by FTDI. 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 harmless FTDI from any and all damages, claims, suits, or expense resulting from such use. This document is subject to change without notice. No freedom to use patents or other intellectual property rights is implied by the publication of this document. Neither the whole nor any part of the information contained in, or the product described in this document, may be adapted, or reproduced in any material or electronic form without the prior written consent of the copyright holder. Future Technology Devices International Ltd, Unit 1, 2 Seaward Place, Centurion Business Park, Glasgow G41 1HH, United Kingdom. Scotland Registered Company Number: SC136640



Appendix A – References

Document References

https://ftdichip.com/products/ft232bl/ https://ftdichip.com/drivers/vcp-drivers/ https://ftdichip.com/document/installation-guides/

Acronyms and Abbreviations

Terms	Description
USB	Universal Serial Bus
UART	Universal Asynchronous Receiver/Transmitter
VCP	Virtual COM Ports



Appendix B – List of Tables and Figures

List of Tables

List of Figures

No table of figures entries found.



7



Appendix C – Revision History

Document Title:	US232B Datasheet US232B Evaluation Cable for FT232B		
Document Reference No.:	FT_000150		
Clearance No.:	FTDI#597		
Product Page:	https://ftdichip.com/product-category/products/		
Document Feedback:	Send Feedback		

Revision	Changes	Date
1.0	Updated Release	18/07/2024