



# BRF6300 Initialization Script Release Notes

**Revision 1.0**

**March 4, 2007**

---

**Copyright © 2005, Texas Instruments Israel Ltd.**

**PRELIMINARY:** documents contain information on a product under development and are issued for evaluation purposes only. Features characteristic data and other information are subject to change.



Please be aware that an important notice concerning availability, standard warranty, and use in critical applications of Texas Instruments semiconductor products and disclaimers thereto appears at the end of this data sheet.

## Information

Script name     BRF6300 1.31 Initialization Script

Filename        BRF6300\_1.31\_P10\_31.txt

Version         10.31

Compatibility   BRF6300 1.31

Comments       Following script support BGA / WSP devices.

## Using Scripts with BTIPS

The attached BTS scripts are compatible with the BTIPS sample applications. Please note that the Bluetooth script is required to be named ***Tlinit\_4.2.38.bts*** for BRF6300. Please note that the BTS scripts are identical to the .txt versions. Default location for sample applications: *C:\TI\InitScript*

## Contents

Item	<b>Power control response when feature disabled</b>	
Description	When host has disabled power control feature bit, device will respond to increase / decrease power requests with LMP_Not_Accepted.	
Ref #		P10_31

Item	<b>TP/INF/BV-14 Qualification test supported</b>	
Description	The failing test verifies that the IUT does not transmit over 4 dbm when features have been exchanged and the Tester does not support RSSI. This test is supported in current service pack.	
Ref #		P10_31

Item	<b>Power consumption improvement</b>	
Description	Power consumption has been reduced during page and inquiry scan.	
Ref #		P10_26

Item	<b>Class 1.5 reduced power levels</b>	
Description	Support for limiting number of power levels in use. For example: if 3 power levels are used, once device has reached the max / min power level, further increase / decrease requests will return LMP_Max_Power / LMP_Min_Power to peer. Please use the Class 1.5 tool for creation of a Class 1.5 power configuration add-on script.	
Ref #		P10_26

Item	<b>EV3 with Retransmissions during scatternet</b>	
Description	Scatternet scenario: BRF6300 does not accept EV3+Retransmission connection request from slave, when BRF is master in one piconet and slave in active mode in another piconet.	
Ref #		P10_23

Item	<b>Role switch during EV3 + retransmission</b>	
Description	BRF6300 Master to 2 remote peers, one link with active EV3 + retransmission. Device did not accept role switch from remote slave to become master. This issue has been fixed in this service pack.	
Ref #		P10_23

Item	<b>Periodic Inquiry Mode</b>	
Description	Upon issuing HCI_Periodic_Inquiry_Mode, Inquiry starts immediately. Periodic timer starts countdown when first inquiry is completed, beforehand periodic timer started directly after command without initial inquiry.	
Ref #		P10_23

Item	<b>Disconnection of eSCO with retransmission</b>	
Description	BRF6300 is master with eSCO + retransmission link. Host requests eSCO disconnection. Disconnection event is delayed between 5 to 15 seconds. This issue has been fixed in this service pack.	
Ref #		P10_23

Item	<b>ACL Loopback issue with CBT Tester</b>	
Description	During ACL loopback test with Dynamic PRBS payload, BER results are degraded compared to static PRBS ACL loopback measurements. This issue has been fixed in this service pack.	
Ref #		P10_23

Item	<b>SCO creation after UnSniff collision</b>	
Description	SCO connection request fails after UNSNIFF collision. Connection establishment fails with false reason returned to peer device (due to prior collision). This issue has been resolved in the service pack.	
Ref #		P10_18

Item	<b>Shorter guard time in EDR packets</b>	
Description	Due to a shorter guard time (EDR) on certain BT testers a new vendor specific command has been introduced to control the guard time. Shorter guard time can cause high PER during testmode, failing BT specifications. Please contact your local support representative for more information.	
Ref #		P10_16

Item	<b>Disabling EV3 feature bits</b>	
Description	When disabling EV3 via feature bits, a SCO connection can not be initiated with Setup_Synchronous_Connection command. Issue has been resolved in service pack.	
Ref #		P10_16

Item	<b>HCI_RESET during testmode</b>	
Description	Creation of a new connection fails after issuing HCI_RESET during testmode. Issue has been resolved in service pack. Please note that an Initscript is required to be run after the HCI_RESET command.	
Ref #		P10_16

Item	<b>Unpark failed during LIH-BV-75 qualification test</b>	
Description	Slave failed to initiate un-park during LIH-BV-75 qualification test due to specific park beacon parameters. This issue has been resolved in the service pack.	
Ref #		P10_16

Item	<b>Read_Remote_Extended_Features</b>	
Description	LMP not sent to peer when HOST issues Read_Remote_Extended_Features command. This issue has been resolved in the service pack.	
Ref #		P10_16

Item	<b>LMP_QOS_REQ error code</b>	
Description	Qualification test TP/LIH/BV-41-C. When receiving LMP not accepted from peer in return for LMP_QOS_REQ, device passes to host a success event instead of actual response.	
Ref #		P10_16

Item	<b>LMP_PTT_REQ Collision</b>	
Description	During testmode with EDR feature bits enabled, connection fails with LMP timeout, after LMP_PTT_REQ has been issued from DUT. When EDR feature bits are not enabled issue does not occur. This issue has been resolved in the service pack.	
Ref #		P10_16

Item	<b>DV loopback support</b>	
Description	Test mode DV loopback test fails. This issue has been resolved in the service pack.	
Ref #		P10_16

Item	<b>Power control feature bits</b>	
Description	Device behavior has been changed to allow device to issue power control requests when power control bit is disabled. Power control feature mask operate independently. This issue has been updated in the service pack.	
Ref #		P10_16

Item	<b>EDR relative power</b>	
Description	EDR output power level relative to GFSK has been improved. EDR power has been increased to be approximately equal to GFSK power.	
Ref #		P10_8

Item	<b>Link Supervision Timeout after Role Switch</b>	
Description	During connection with altered link supervision timeout value, a role switch scenario will result in the link supervision timeout value returning to default. Please note that a failing role switch <b>will not</b> return the link supervision timeout to default.	
Ref #		P10_7

Item	<b>RF Improvements</b>	
Description	BER characteristics during EDR have been improved in the current service pack.	
Ref #		P10_7

Item	<b>External FREF default - XTAL Disabled</b>	
Description	The support for external XTAL has been disabled; external FREF configuration will be used as default. Please note that if your design requires an external crystal, XTAL support must be enabled. For more info please see the HCI_VS_Fast_Clock_Configuration Vendor Specific Command.	
Ref #		P10_7

Item	<b>100% PER with Anritsu Bluetooth tester</b>	
Description	During testmode the BRF device sent packets with incorrect access code, causing testing with the Anritsu tester to fail. This issue has been solved in the current service pack.	
Ref #		P10_7

Item	<b>Pin code timeout</b>	
Description	Initial authentication timeout period after entering a wrong pin code has been updated to a 2 second period before a new pin code can be authenticated.	
Ref #		P10_7

Item	<b>Continuous TX during EDR</b>	
Description	The default operation of HCI_VS_DRP_Tester_Continuous_TX during EDR-2 and EDR-3 does not function. Please contact your customer support representative for an appropriate script.	
Ref #		P10_7

Item	<b>Packet type change during authentication</b>	
Description	Host requests authentication, receives a status event and sends a HCI_Change_Connection_Packet_Type command and an HCI_Link_Key_Req event is sent to the host; BRF device does not deliver HCI_Change_Connection_Packet_Type status event to host (BRF waits for the HCI_Link_Key_Response from host), resulting in a host response timeout in the BRF which eventually results in an authentication timeout. This issue is resolved in the current firmware. Please note that the current firmware, on new connection negotiation, creates a link with DH5 enabled, therefore no change packet type command is required.	
Ref #		

Item	<b>AFH during EDR</b>	
Description	Adjusted threshold for bad channel classification during EDR operation.	
Ref #		

Item	<b>CMU ACL loopback</b>	
Description	During testmode scenario with ACL loopback the BRF DUT device returned corrupted packets to CMU Tester, with no payload, containing headers only. This issue has been solved in the current service pack.	
Ref #		

Item	<b>VS_Write_I2C_Register_Enhanced event opcode</b>	
Description	The VS_Write_I2C_Register_Enhanced vendor specific command returns a command complete event with the Opcode of VS_Write_I2C_Register 0xFE0E. To overcome this issue use the following wait command in scripts: Wait_HCI_Command_Complete_Event 5000, any, 0xFE0E, 0x00	
Ref #		

**Note:** Above changes are firmware bug fixes required by Bluetooth specification and have no effect on previous Bluetooth certification.

### **Important Notice**

Texas Instruments and its subsidiaries (TI) reserve the right to make changes to their products or to discontinue any product or service without notice, and advise customers to obtain the latest version of relevant information to verify, before placing orders, that information being relied on is current and complete. All products are sold subject to the terms and conditions of sale supplied at the time of order acknowledgement, including those pertaining to warranty, patent infringement, and limitation of liability.

TI warrants performance of its semiconductor products to the specifications applicable at the time of sale in accordance with TI's standard warranty. Testing and other quality control techniques are utilized to the extent TI deems necessary to support this warranty. Specific testing of all parameters of each device is not necessarily performed, except those mandated by government requirements.

Certain applications using semiconductor products may involve potential risks of death, personal injury, or severe property or environmental damage ("Critical Applications"). TI SEMICONDUCTOR PRODUCTS ARE NOT DESIGNED, AUTHORIZED, OR WARRANTED TO BE SUITABLE FOR USE IN LIFE-SUPPORT DEVICES OR SYSTEMS OR OTHER CRITICAL APPLICATIONS. INCLUSION OF TI PRODUCTS IN SUCH APPLICATIONS IS UNDERSTOOD TO BE FULLY AT THE CUSTOMER'S RISK.

In order to minimize risks associated with the customer's applications, the customer to minimize inherent or procedural hazards must provide adequate design and operating safeguards.

TI assumes no liability for applications assistance or customer product design. TI does not warrant or represent that any license, either express or implied, is granted under any patent right, copyright, mask work right, or other intellectual property right of TI covering or relating to any combination, machine, or process in which such semiconductor products or services might be or are used. TI's publication of information regarding any third party's products or services does not constitute TI's approval, warranty or endorsement thereof.