



BDS2 Release Notes – September 1, 2021

These release notes apply to the following firmware revision, compared against the last documented revision below:

BDS2 Receiver: 7001A991-13.mender.bdsu

Name	Version	Date
BDS2 Build Info	BDS2_Receiver-70	09/01/2021
BDS2 Host	3.7	08/27/2021
FPGA	0.112	01/04/2021
CmpData DLL	3.7	08/27/2021
BDS2 Web UI	3.7	08/26/2021

New Features:

- 1) Added support for alternate ADC for supply-chain flexibility. Firmware is compatible with all versions of hardware. No changes to features or performance.

No changes to GUI software or API package.



BDS2 Release Notes – April 20, 2021

These release notes apply to the following firmware revision, compared against the last documented revision below:

BDS2 Receiver: 7001A991-12.3.6.mender.bdsu

Name	Version	Date
BDS2 Build Info	BDS2_Receiver-64	04/20/2021
BDS2 Host	3.6	04/20/2021
FPGA	0.112	01/04/2021
CmpData DLL	3.6	04/20/2021
BDS2 Web UI	3.6	03/22/2021

BDS2 GUI Software: 7001A992-6.zip

BDS2 GUI v3.6, 20210420

BDS2 API Package: 7001A997-3.zip

BDS2 API v3.6, 20210420

New Features:

- 1) Added data reporting over RS232 to support the 7001A900-3 model
- 2) Added arc event reporting over RS232 to support the 7001A900-3 model
- 3) Redesigned the trigger function to allow triggering by frequency
- 4) Added the choice to save multiple trigger events into a single file or multiple files
- 5) Limited the number of available datasets in the GUI to 130000
- 6) Redefined the harmonics index from 0-4 to 1-5
- 7) Added the total number of available states (48) to the GUI
- 8) Redesigned the API for more reliable operation and better error checking
- 9) Added support to the API for C++, VB, and Python
- 10) Created a 64-bit version of the API for C++ and VB

Bug Fixes:

- 1) Fixed file saving in the GUI to support long data captures
- 2) Fixed the time plot in the GUI to support long data captures



BDS2 Release Notes – February 6, 2020

These release notes apply to the following firmware revision, compared against the last documented revision below:

BDS2 Receiver: 7001A991-11.3.2.mender.bdsu

Name	Version	Date
BDS2 Build Info	BDS2_Receiver-50	02/06/2020
BDS2 Host	3.2	02/06/2020
FPGA	0.112	01/04/2020
CmpData DLL	3.2	02/06/2020
BDS Web UI	3.1	01/15/2020

BDS2 GUI Software: 7001A992-5.zip

BDS2 GUI v3.2, 20200207

New Features:

- 1) Standard Tracking Mode
 - a. Frequency Selection Tab
 - i. Single Frequency dialog
 1. Added custom frequency entry capability
 - ii. Fundamental groups
 1. Added 2.0, 13.56 MHz
 - iii. Tracking Mode Settings
 1. Changed “Tracking Mode” drop-down to “Tracking Settings” buttons
 2. Added fixed-frequency mode
 3. Added adjustable voltage and current noise thresholds
 4. Added V Tracking, I Tracking, or Auto Tracking selection
 5. Added seed frequencies (tracking) or state frequencies (fixed) for each state
 6. Added Pulse Mode Sync Delay
 - iv. Multi-Level Mode
 1. Added Pulse Period entry
 - b. Free Run Tab
 - i. Changed “Run Time” display to read-only to avoid confusion
 - c. Transient Detection Tab
 - i. Added option to ignore transient events at attenuation change (AGC enabled)
 - ii. Added option to disable “Transient Detected” pop-up window
 - d. File Options
 - i. Added FwdPower and RfIPower to selection list for CSV log file.
- 2) Spectral Search (Sweep) Mode
 - a. Added Phase(Deg) to Graph Options



- b. Added more information to the CSV log file, including header, phase, impedance, and power

Bug Fixes:

- 1) LAN interface drop-out after extended run time
- 2) JESD204b alignment issues after extended run time
- 3) Transient detection file transfer issue causing some events to be missed

Known Open Bugs:

- 1) Marker issues in Time Domain Mode



BDS2 Release Notes – April 9, 2019

These release notes apply to the following firmware revision, compared against the last documented revision below:

BDS2 Receiver:

Name	Version	Date
BDS2 Build Info	BDS2_Receiver-32	04/09/2019
BDSHost	2.0	04/09/2019
FPGA IP	0.82	04/06/2019
FPGA Firmware	0.82	04/06/2019
CmpData	2.0	04/09/2019

BDS2 GUI Software:

BDS2_GUI v2.0, 20190409

New Features:

- 1) Added Single Frequency entry
- 2) Fundamental groups
 - a. Added 160 MHz to 0.4, 13.56 MHz
 - b. Added 3.2, 40.68 MHz
 - c. Added 3.2, 60 MHz
 - d. Added 12.88, 40.68 MHz
 - e. Added 13.56, 100 MHz
- 3) Removed availability of 1 MHz detection filter for fundamentals less than 1 MHz
- 4) Removed "Halt Measurement"
- 5) Moved File Options to File menu
- 6) Added 2nd Y-axis for multiple trace graphing
- 7) Added adjustable display data rate from 2ms to 600s
- 8) Added capability to enable or disable the frequency trackers
- 9) Added AGC Reset Delay to Gain Control menu, which applies for pulsed operation
- 10) Added Time-domain mode
- 11) Added licensing for time-domain feature and future licensed options
- 12) Added the ability to switch FPGA images for different feature sets

Bug fixes:

- 1) Logarithmic sweep spacing incorrect
- 2) Tracking mode averaging problem when disabling moving average
- 3) Spectral sweep marker control issues