

ETRX2 Firmware Revision History

In order to find out the revision of your module's firmware use the "ATI<cr>" command.

If you are an existing customer and want to update your firmware please contact zigbeesupport@telegesis.com

R301 – 16-09-2008

Changes

- Upgraded from EmberZNet3.1 to EmberZNet3.2
- Fixed Problem with specifying EPID in S03 on joining Node
- Removed functionality 0018 temporarily for memory savings
- Fixed cloning to End Devices from Nodes other than the Parent
- Improved cloning mechanism. AT+CLONE can also address NodeIDs and Address table indexes (when cloning to devices >R300).
- It is now possible to write to address table entry 05 (sink entry)
- Data sent to endpoint 0 and 2 is now displayed transparently (if enabled)
- Added bit 2 of S0F to enable displaying all sink advertisements (disabled by default). New Prompt: ADSK:<EUI64>,<NodeID>
- Added bit 7 of S10 to stop node from replacing existing sink with better one (lower cost)
- Added volatile S46 for data related to start-up functionality.
- Contents of S46 (16 bit number) is attached to tracking messages (functionality 0112 and 0113)
- Fixed ATSALL triggering replies
- Added bit A of S0A to disable joining nodes to ask for the Trust Centre link key.
- Improved Trust Centre EUI64 caching
- Fixed Source Route handling
- AT+FNDSR is now working at ZDO Level (works with 3rd party nodes), but only when addressed with EUI64 or address table index.
- Debouncing now operates on all 4 IRQ inputs when enabled and works in sleep modes
- Fixed sending SCASBs with a payload smaller than 5 bytes

Registers and Commands affected

- S03
- functionality 0018
- AT+CLONE
- S0F
- ATSALL
- S0A
- AT+FNDSR

Indirectly affected

Nothing

Upgrade information available

None

Upgrade Note Details

For the new cloning mechanism the user needs to ensure that the target device is just a single hop away before initiating the cloning process. If this is not the case the remote node will remain in the bootloader until reset or recovered using AT+RECOVER.

R302 – 30-04-2009

Changes

- Upgraded to EmberZNet3.3.3
- Fixed AT+N providing odd results if node is not part of a network
- Fixed functionalities 0012 to 0014 to cause routers to re-join non existing networks three times.
- Added functionality 0018
- Setting bit 9 of S0A on the ZC before starting the network will start the network without the use of a central Trust Centre (distributed Trust Centre mode, not ZigBee compliant). Note: Only a global link key can be used, so Setting bit 7 of S0A will be ignored in this mode)
- Added command AT+BECOMETC to allow the ZC in a network which has been started with a distributed TC to become the TC.
- Setting Bit D of S10 changes the sinks and Trust Centre to be of type EMBER_HIGH_RAM_CONCENTRATOR. This will cause remote nodes not to send a source record message only before the first message sent to the sink or Trust Centre and not repeatedly.
- Sinks also send a many-to-one route request via functionality 02xx and create aggregation routes
- AT+PING and replies to AT+SN use ZDO device announce messages for improved ZigBee compatibility
- ADSK prompt is only shown for sink advertisements of sinks, which aren't the local node's sink
- Shortened S0B to 16 characters.
- Fixed functionalities 0108 and 0109 to only send a maximum of 47 characters
- Fixed deep sleep IRQ handling
- Added S47 to represent the Node's Power Descriptor
- Added S48-S4B to configure the Node's second endpoint
- Added new ZDO commands for Device and Service Discovery: AT+IDREQ, AT+EUIREQ, AT+NODEDESC, AT+POWERDESC, AT+ACTEPDESC, AT+SIMPLEDESC, AT+MATCHREQ
- Improved Cloning Mechanism
- Re-Introduced the AT+DMODE command (known as AT+OPCHAN in R2xx) to create a serial link between any two devices
- Added possibility to join as non sleepy end device (RX on when idle) by modifying the meaning of bits E and F in S0A. New Device type is called ZED.
- Changed formatting of the AT+NTABLE command
- Improved Network Formation and Joining
- Changed S-Registers to not do a Network Key update automatically from the COO and added command AT+KEYUPD to do this manually.
- Source Routes get deleted in case of unsuccessful delivery of a unicast, unless bit D of S10 is set
- Added S4D, S4E and S4F for expert stack timing adjustments
- Improved remote S-Register access to allow concurrent accesses.
- Inverted functionality for bit 8 of S10 to prevent frequent broadcasts to search for sink
- Added Data mode (in R2xx know as "channel")
- Changed S28 to trigger on Network Join
- AT+PING renamed to AT+ANNCE for clarity (AT+PING is still supported for backward compatibility)
- Changed format for response to AT+NTABLE to be inline with other ZDO prompts
- End Devices, which have lost their parent will report "LostPAN" instead of "LeftPAN" as they are still part of the PAN and simply can't talk to it any more. AT+N will still show the network parameters. Use AT+REJOIN or simply poll to find new parent or AT+DASSL to leave.
- In case a parent knows a sink it will pas it on to any joining end device. In case the parent's sink gets updated the parent will update all children using a broadcast.
- Added functionality 0400 (known as 0200 in R2xx).
- Improved AT+FNDSR
- Replies to ATREMS have been re-formatted for better usability

Registers and Commands affected

- AT+PING
- AT+SN
- AT+CLONE
- S0A
- AT+NTABLE

Indirectly affected

Nothing

<ul style="list-style-type: none">- ATREMS- S28	
Upgrade information available none	Upgrade Note Details <ul style="list-style-type: none">- "FFD" and "COO" prompt have been combined into "FFD"- Formatting of ATREMS has changed- After upgrading a factory reset will be conducted- Cloning between R301 and R302 won't work- By default nodes don't search sink automatically if none is known to prevent frequent broadcasts (bit8 of S10)