



RIM OEM Radio Modem for GSM/GPRS Wireless Networks 3.3.0.180 (1.2.180.112).

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### Functional changes and resolved issues

The following is a list of functional changes and resolved issues from build 3.3.0.168 to build 3.3.0.180 of the RIM OEM Radio Modem for GSM/GPRS Wireless Networks.

#### AT commands

A result code can now be returned in both text and numeric format. An extra trailing space was also removed from ATD response "CONNECT ". (Change 276365).

The radio modem now returns a result code before initiating reset when the ATRIMDEVICE command is sent to perform a hard reset. (Change 280911).

Options were added for AT+RSCI command to set use the coverage indicator as a data carrier detect (DCD) line for serial communication. Settings are now AT+RSCI=(0-3), where:

- 0 – GSM mode; indicates when the modem is in GSM coverage.
- 1 – GPRS mode; indicates when the modem is in GPRS coverage.
- 2 – DCD (Data Carrier Detect); sets the pin to operate as a carrier detect signal (RS-232)

Note: inversion is required before level-shifting.

- 3 – DMD (Data Mode Detect); sets the pin to indicate when the modem is in data or command mode.

This profile setting can be stored in NVRAM using AT&W. (Change 284012)

A change was made to correct a situation in which the radio modem would return an OK result code when switching from a command mode to a command mode. (Change 29196)

A change was made to remove the extra carriage return and line feed from the Hayes escape sequence. (Change 312340).

#### Radio

A change was made to correct a problem in which the radio modem disconnects a PPP session (by sending a DSR deassertion) when deasserting DTR. (Change 275286)

A change was made to increase the delay required before a reset at lower baud rates, such as 9600. (Change 281000)

Pseudo-bauding implementation now correctly sets the device to 115200 bps when serial connection operates at this baud rate. Previously, the modem would still operate at this baud rate, but it was possible for users to set pseudo-bauding to a different baud rate inadvertently. (Change 287794)

The radio modem now reports radio access capability for both GSM850 and PCS instead of just the band it is on. (Change 274913)

The radio modem is now able to build a neighbor list containing both Si2 with Si2-ter BA lists, which enables 850 and 1900 channels to be monitored at the same time. (Change 274786)

The radio modem no longer uses SI messages from the network to use the max Tx power of PCL 7 (Power class 5) for 850 band. The maximum Tx power is clipped in lower levels of the code. (Change 279809)



A change was made to enable GRR\_NC\_MEASUREMENTS and to correct the algorithm of calculating timeslot from timeslot\_bitmap. (Change 279449).

If the band from which BCCH is being received is 850, the radio modem now assumes that a 3-digit MNC decode is necessary. (Change 281272).

A radio change was made (1800/900 MHz) to handle handover issues. (Change 310860)

### Voice functionality

Changes were made to support auto-answering, as well as to enable the radio modem to answer incoming voice calls while in an active PDP context. (Change 281683)

A change was made so that Class B functionality works correctly: the radio modem can now operate in GPRS data mode while making voice calls. (Change 288075)

The radio modem now sends a new classmark 3 format to enable 850/1900 devices to handover over between 850 and 1900 bands during voice calls. Classmark 3 includes both GSM850 and PCS bands for a 850/1900 device instead of the band on which the radio synchronized. (Changes 278129, 276884, 278462)

Changes were made so that audio volume settings are no longer reset on each call. (Change 292777)

### Miscellaneous

An extra second was added to the duration of T3126. (Change 276199)

T3126 can vary between T+2S slots of MS RACH and 5 seconds. Two extra seconds were added to the minimum to allow for loaded slow networks. (Change 275914).

The GMM state is now set to GMM\_REGISTERED\_ATTEMPTING\_TO\_UPDATE when RAU is retried. (Change 279464).

Changes were made to correct problems with AT&D2 setting. (Change 284012)

A change was made to correct an issue where the second SMS message in a Class 2 transmission was not being acknowledged. Change 305049)

A change was made so that now when a PDP Context Reject occurs, the operating system no longer locks up or resets. (Change 308492)

The Queried UDP Information Protocol (QUIP) feature enhancement was added.

A change was made to correct dynamic timeslot reassignment during a TBF. (Change 322869)

A change was made to correct errors that occurred due to excessive messaging from a serial interrupt when the device is flow controlled. (Change 319602)