

\\\\\\\\This list tediously mapped by John Ball and only possible by the hard work of the Blackberry user
\\\\\\\\community found throughout various Blackberry forums and blog posts
\\\\\\\\See updates @ www.johndball.com

Italicized options are accessible if the options button is pressed

Bold options execute actions

Access the Engineering screen by pressing ALT+aA+H on the Blackberry Bold 9000

- Engineering Screen Contents
 - Mobile Network Engineering Screens
 - Utilities
 - **GPRS Attach**
 - **GPRS Detach**
 - **Ping Self**
 - Session Manager
 - New Ping Session
 - New TraceRoute Session
 - New UDP Blaster Session
 - Manage PDP Contexts
 - 0 -6
 - PDP Context
 - PDP Context Index
 - PDP Context State
 - APN
 - IP Address
 - Statistics
 - TX Octet Count
 - RX Octet Count
 - Duration
 - Actions
 - **Deactivate This PDP Context**
 - Transmit IP Test Data
 - TX Data Unit Size (bytes)
 - Number of TX Data Units
 - Destination IP Address
 - **Save Current Settings**
 - **Transmit ICMP Data**
 - Activate PDP Context
 - APN: blackberry.net
 - Username: (default in field is "rim")
 - Password: (default in field is "password")
 - IP Address
 - Linked PDP Index (secondary PDP)
 - Rel 99 QOS
 - Requested QOS
 - Delivery of Erroneous Pdus
 - Delivery Order
 - Traffic Class
 - Max SDU Size
 - Max Bit Rate UL
 - Max Bit Rate DL
 - Residual BER

- SDU Error Ratio
 - Transfer Delay
 - Traffic Handling Priority
 - Guaranteed Bit Rate UL
 - Guaranteed Bit Rate DL
 - **Save QOS settings**
 - Min Acceptable QOS [Same as Requested QOS]
- Predefined PDP Contexts
 - **AT+CGEQREQ=**
- Predefined TFT
 - **AT+CGTFT=**
- TFT (secondary PDP) [stands for Traffic Flow Template]
 - Num of packet filters
 - Packet Filter 1-8
 - ID
 - Precedence
 - IPv4 Address
 - IPv4 Address Mask
 - IPv6 Address
 - IPv6 Address Mask
 - Protocol
 - Dest Port
 - Dest Port Low
 - Dest Port High
 - Source Port
 - Source Port Low
 - Source Port High
 - Security Parameter Index
 - Traffic Class tos
 - Traffic Class mask
 - Flow Label Type
 - **Save Packet Filter Settings**
 - **Clear Packet Filter Settings**
 - **Save TFT Settings**
 - **Activate Primary PDP (no min QoS)**
 - **Activate Primary PDP (with min QoS)**
 - **Activate Secondary PDP (no min QoS)**
 - Rel 97 QoS
 - Requested QOS
 - Priority Class
 - Reliability Class
 - Delay Class
 - Peak Throughput Class
 - Mean throughput Class
 - **Save QOS Settings**
 - Min Acceptable QOS [same as Requested QOS]
- **Deactivate All PDP Contexts**
 - *Selecting this clears PDP contexts (blackberry.net, wap.cingular) however I rebooted and these entries reappeared once I connected back to the network
- **IP Modem Solo Mode:** (default ENABLED)
- **BlackBerry Protection Mode:** (default DISABLED)
- PDP WM Details
 - Current WM: (default on my device 3 (unset))
 - New WM: (default 3)

- **Set the watermark**
- **Unset the watermark**
- Set/View WM Trigger SMCause List
 - **Turn ON OPERATOR DETERMING**
 - **Turn ON LLC SMDCP FAILURE**
 - **Turn OFF INSUFFICIENT RESOURCES**
 - **Turn ON MISSING OR UNKNOWN APN**
 - **Turn ON UNKNOWN PDP ADDRESS OR PDP T**
 - **Turn ON USER AUTHENTICATION FAILED**
 - **Turn ON REJECTED BY GGSN**
 - **Turn OFF REJECTED UNSPECIFIED**
 - **Turn ON SERVICE OPTION NOT SUPPORTED**
 - **Turn ON REQUESTED SERVICE OPTION NOT S**
 - **Turn OFF SERVICE OPTION TEMPORARILY OU**
 - **Turn ON NSAPI ALREADY USED**
 - **Turn ON REGULAR DEACTIVATION**
 - **Turn ON QOS NOT ACCEPTED**
 - **Turn OFF NETWORK FAILURE**
 - **Turn ON REACTIVATION REQUIRED**
 - **Turn ON FEATURE NOT SUPPORTED**
 - **Turn ON SEMANTIC ERROR IN TFT OPERATION**
 - **Turn ON SYNTACTICAL ERROR IN TFT OPERATION**
 - **Turn ON UNKNOWN PDP CONTEXT**
 - **Turn ON SEMANTIC ERROR IN PACKET FILTER**
 - **Turn ON SYNTACTICAL ERROR IN PACKET FILTER**
 - **Turn ON PDP CONTEXT WITHOUT TFT ALREA**
 - **Turn ON INVALID TRANSACTION IDENTIFIER V**
 - **Turn ON SEMANTICALLY INCORRECT MESSAGE**
 - **Turn ON INVALID MANDATORY INFORMATION**
 - **Turn ON INVALID MESSAGE TYPE**
 - **Turn ON BAD MESSAGE TYPE FOR STATE**
 - **Turn ON INVALID INFORMATION ELEMENT**
 - **Turn ON CONDITIONAL IE ERROR**
 - **Turn ON BAD MESSAGE FOR STATE**
 - **Turn OFF UNSPECIFIED PROTOCOL ERROR**
- WM LAI History: (mcc/mnc/lac == x)
- Statistics For All PDP Contexts Since L
 - Total TX Octet Count:
 - Total RX Octet Count:
- Transmit LLC Test Data
 - Data Amount (bytes): 1000
 - APN Id: 0
 - *Save Current Settings*
 - *Transmit LLC Data*
- Transmit IP Test Data
 - TX Data Unit Size (bytes)
 - Number of TX Data Units
 - Destination IP Address
 - *Transmit ICMP Data*
- SMS Test Screen
 - Num Record stored in ME
 - **Set ME Memory**
- AoC Options

- AMC
- ACM_max
- **This SIM does not support ACM**
- **This SIM does not have EF_ACMmax**
- Auto-answer Mode
 - **Auto Answer** (disabled/enabled)
- Compression Mode
 - **RFC114** (passive/active)
 - **RFC2507** (passive/active)
 - **V.42bis** (passive/active)
- Ciphering
 - **A5/3 and GEA3 ciphering** (disabled/enabled)
- Radio Capabilities
 - UTMS Band
 - UMTS Bands Supported
 - *Band1*
 - *Band2*
 - *Band1,2*
 - *Band1,5*
 - *Band2,5*
 - *Band1,2,5*
 - *Band1,2,5,6*
 - Set UMTS supported bands [same as above]
 - DTM
 - *Disabled DTM*
 - *Disable HSDPA*
 - *Disable AGPS*
 - *Disable Fast Dormancy*
 - *Disable UEA1 support*
 - *Enable/Disable ARM9 Fake*
 - HSDPA Support [menu same as above]
 - AGPS Support [menu same as above]
 - Fast Dormancy [menu same as above]
 - UEA1 Support [menu same as above]
 - ARM9_CLOCK_FAKE Enabled [menu same as above]
- SIM Utilities
 - SIM polling interval
 - *Save Polling Interval*
 - *Disable SIM recovery*
 - SIM recovery [menu same as above]
- Profile String
 - [a lot of information, looks like an event log such as SIM authentication, network profile changes, logs where I changed from 3G to 2G, cell tower changes, etc...]
- Radio API Call Counter
 - [a lot of call counters, only options are to reset and freeze counters]
- Cell Information
 - *Set BandMode*
 - *Disable Uplink 8PSK*
- Neighbour Cells
 - *Leave camped cell*
 - *Select this cell*
 - *Discard this cell*
 - *Lock to this cell*
 - *Undo cell lock*

- System Information
 - System Information Type 1
 - No Cell
 - System Information Type 2/2bis/2ter
 - No Cell
 - System Information Type 3/4
 - No Cell
 - System Information Type 5
 - No Cell
 - System Information Type 13
 - No Cell
 - SIB Validity
 - [appears to be a log, information was changing in real-time]
 - MIB
 - [appears to be a log, information was changing in real-time]
 - SchedulingBlk1
 - SB1 not present
 - SchedulingBlk2
 - SB2 not present
 - SIB1
 - [appears to be a log]
 - SIB2
 - SIB2 not present
 - SIB3
 - [appears to be a log]
 - SIB4
 - SIB4 not present
 - SIB5
 - [appears to be a log]
 - SIB6
 - SIB6 not present
 - SIB7
 - SIB7 not present
 - SIB8_9
 - This screen is yet to be implemented
 - SIB11
 - [appears to be a log]
 - SIB12
 - Not so implemented yet!
 - SIB15
 - This screen is yet to be implemented
 - SIB16
 - This screen is yet to be implemented
 - SIB18
 - This screen is yet to be implemented
- Voice Channel
 - Voice Stats
 - Codec
 - *Set Voice Codec*
 - *Disable DTM*
 - DTM: Yes
 - Preferred Codec: Default
 - Vocoder: AMR HR
 - UL DTX: ENABLED

- DL DTX: DISABLED
- RXLevFull: 20 RxLevSub: 20
- RxQualFull: 5 RxQualSub: 5
- UL CMI 2 CMR 1
- DL CMI0 CMC 2
- Threshold 28 24 0
- Hysteresis 3 3 0
- GMSK Thresholds
 - GMSK SNR Threshold (dB)
 - *Set New Threshold Values*
 - *Reset Threshold Values*
 - *Check Spelling*
 - FS BER Threshold
 - HS Thresholds
 - HS Speech BER Threshold
 - HS Sid BER Threshold
 - AFS Thresholds
 - AFS 4.75 BER Threshold
 - AFS 5.15 BER Threshold
 - AFS 5.90 BER Threshold
 - AFS 6.70 BER Threshold
 - AFS 7.40 BER Threshold
 - AFS 7.95 BER Threshold
 - AFS 10.2 BER Threshold
 - AFS 12.2 BER Threshold
 - AHS Thresholds
 - AHS 4.75 BER Threshold
 - AHS 5.15 BER Threshold
 - AHS 5.90 BER Threshold
 - AHS 6.70 BER Threshold
 - AHS 7.40 BER Threshold
 - AHS 7.95 BER Threshold
 - 2G call Monitor
 - Bandmode = Not Camped
 - State
 - Bands = 900 850 1800 1900
 - Cell = No Coverage
 - ARFCN = No coverage
 - Vocoder = AMR HR
 - UL DTX = ENABLED
 - UL CMI = 2
 - DL CMI = 0
 - Supported UMTS Codecs
 - **UMTS_AMR: ENABLED**
 - **UMTS_AMR2: ENABLED**
- Mobility Management
 - RRC State: Idle
 - T3312 [timer, it was counting down from 02:56:28]
 - T3314 [timer, inactive]
 - Message Log
 - [appears to be a log]
 - Equivalent Plmn List
 - FFFF:FFFF
- Call Information
 - Type of call: NO CALL

- Compressed Mode Status:
- CS RAB Screen
 - Id CallType Codec Chnl Speed ULSF DLSF
 - FER matrix: TBD
- PS RAB Details
 - Id Chnl UL & DL Speed ULSF DLSF
 - BLER: TBD
 - [I noticed when data was being transmitted, data changed on this screen, once data was finished being transmitted this data disappeared]
- Access Attempt Screen
 - Reset RACH/PRACH statistics
 - Number of RACH attempts
 - Initial preamble tx power
 - Step size
 - Final preamble tx power
 - Number of PRACH preambles tx
 - RetransMax
 - Number of successful PRACH tx
 - Number of PRACH not Acked
 - Number of PRACH Nacked
 - *Reset PRACH stats*
- UTMS Radio Counters
 - Profile String
 - Radio API Call Counter
 - Cell Information
 - Neighbour Cells
 - System Information
 - Voice Channel
 - Mobile Identity
 - Mobility Management
 - Call Information
 - UMTS Radio Counters
 - SIM Browser
 - Assert log
 - PLMN Selection
 - Calibration Data
 - Location Services
- WiFi 802.11 Engineering Screens
- OS Engineering Screens
- JVM Engineering Screens
- Display Event Log
- Deactivate Radio
- Power Off