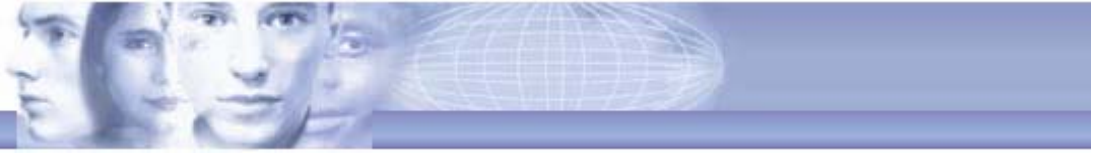




Q24NG migration framework



Disclaimer

- ✓ Time frames and delivery schedules are subject to change at Wavecom's discretion.
- ✓ Trinity Telecomms assumes no liability for any misunderstandings as a result of the following information.
- ✓ Trinity Telecomms guarantees the integrity of the information contained herein as at the date of release of this document.



Q24NG overview

- ✓ Four variants: Classic, Plus, Extended and Automotive
- ✓ Quadband (850/900/1800/1900)
- ✓ RoHS compliant
- ✓ "F" memory (32/16)
- ✓ I2C bus
- ✓ U.FL RF connector
- ✓ SIM holder option (Plus and Extended only)



Hardware impact

- ✓ Pin to pin compatibility with current Q24 series
- ✓ Mechanical footprint compatible
- ✓ Existing RF solder option maintained
- ✓ Limited electrical interface change
- ✓ New RF components – new approval requirements (re-approval of existing products required)
- ✓ Existing power supply design compatible



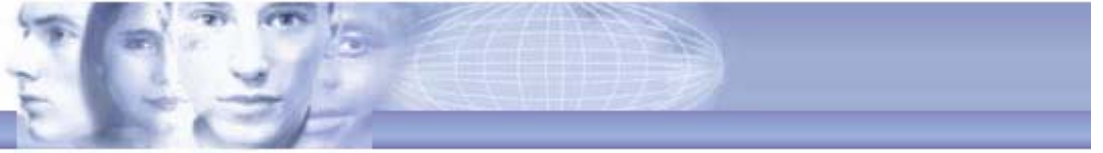
Electrical differences (preliminary)

Pin #	Signal name	function	Q24xx (all) value	Q24NG (all) value
55,57,58,59,60	VBATT	Battery input	3v3 to 4v5	3v3 to 4v5 (up to 4v8 TBC)
11	VDD	Baseband supply	3v1 to 4v5	3v1 to VBATT (max TBC)
1,2,4	CHG-IN	Supply for battery charging	6v/800mA	6v/800mA
40	VCC	2v8 digital output supply	2v8/10mA	2v8/100mA
9	SIM-VCC	SIM card supply	2v8	2v9 or 1v8



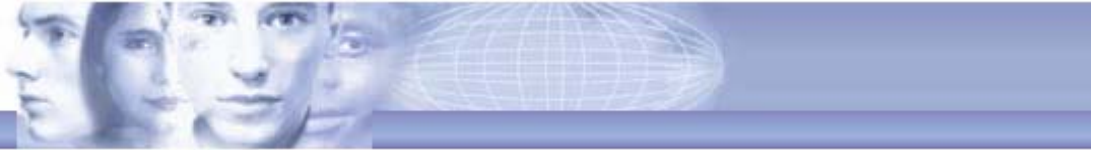
Electrical differences (prelim) cont.

Pin #	Signal name	function	Q24xx (all) value	Q24NG (all) value
7	SIM-DATA	I/O SIM interface	2v8	2v9 or 1v8
5	SIM-RST	Reset for SIM interface	2v8	2v9 or 1v8
3	SIM-CLK	Clock for SIM interface	2v8	2v9 or 1v8
49	Buzzer	Buzzer output	80mA peak (open collector)	100mA peak (open drain)
6	On/off	Power on/off control	Low logic = 0 to 0.6v high logic = 2v4 to VBATT + 0.5v	Low logic = VBATTx0.2v High logic = 0.8xVBATT to VBATT+0.3v



Mechanical differences

- ✓ RF solder pad position and footprint has changed (optimised with larger ground area)
- ✓ U.FL antenna connector option added below
- ✓ As a result of U.FL addition, IMP pad placement has changed.
- ✓ Shielding frame and cover has been updated, but compatibility has been maintained



S/W, F/W impact

- ✓ New firmware (6.57) based on X.55 branch (all features and corrections in 6.55 carried over). Flat battery management correction implemented.
- ✓ Single firmware version simplifies order process (X.4x firmware branch discontinued)
- ✓ New features – ENS, 7 cells TA, 1.8/3/5V SIM management
- ✓ New Open AT platform (3.12) based on existing Open AT platform (3.10). New features and corrections implemented.
- ✓ New Wavecom IP stack, with new features – eDevice software components EOL
- ✓ Consolidated memory size – all NG products have “F” memory configuration.



Migration options

Q24 Classic	Q24 Plus	Q24 Extended	Q24 Auto
 Quad band GSM only 1 to 6 MIPS -20/+55°C	 Quad band GSM / GPRS 9 to 13 MIPS -20/+55°C Numerous plug-ins Option 	 Quad band GSM / GPRS 9 to 13 MIPS -40/+85°C Numerous plug-ins Option 	 Quad band GSM / GPRS 9 to 13 MIPS -40/+85°C MMS connector Numerous plug-ins Automotive qualified Traceability
Replaces Q2400A	Replaces Q2406B, Q2426B		Replaces Q24-C

- ✓ Two distinct hardware versions of each variant – one supporting AMR (adaptive multirate) and one supporting HR (half rate). AMR is a requirement for the American market, but is not a voice codec supported in RSA. SIM holder option and Q24 Auto only available in AMR version.



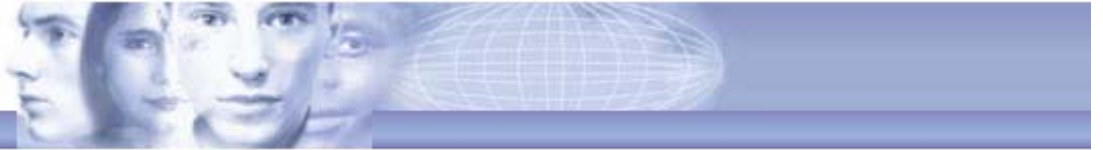
Replacement options

Current Q24xx product	Q24NG replacement
Q2400A	Q24NG Classic
Q2406A	Q24NG Plus
Q2406B	
Q2426B	
Q2406-c	Q24NG Extended
Q2406-c Automotive	Q24NG Automotive



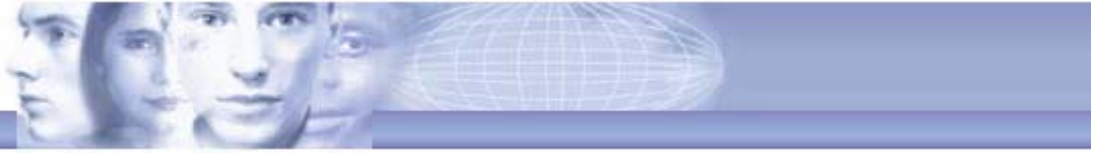
Time schedules

Q24xx current	657, OAT V3.12 beta				Last time buy			Last delivery	
E-Device stack					Last time delivery				
Q24NG (all)	Limited samples			Official release					
Open AT V.3.12	beta								
TCP/IP WIPsoft (AT interface)		beta							
TCP/IP WIP (OAT API's)	beta								
Internet WIPsoft		beta							
Internet WIP		Beta							
date	20 th Sept	29 th Sept	16 th Oct	31 st Oct	23 rd Nov	31 st Dec	31 st March '07	30 th June '07	



Recommended migration path

- ✓ Beta releases of 6.57 and Open AT V 3.12 are currently available for the Q2406B platform to fast track the migration process.
- ✓ Existing applications can be ported to this platform using existing product.
- ✓ It is suggested that new designs are based on this firmware and software release to anticipate the migration.
- ✓ Validation of this firmware and software platform can be extended to the last buy date for the existing Q2406B platform, but it is recommended to complete integration of the new platform as soon as possible.
- ✓ A beta release of the WIP AT command interface will be made available for applications using the AT# interface of the e-Device TCP/IP or Internet plug as this interface will change.
- ✓ Open AT applications using e-Device API's should be migrated to the WIP API's as soon as possible – beta releases will be made available.
- ✓ Internet plug-in activation process will remain the same, and existing keys will remain valid.



Impact on product certification

- ✓ Existing certification based on current Q24 series does not cover the integration of the Q24NG product due to changes in RF part and improved SIM interface.
- ✓ A new FTA certificate is required with the following tests done:
 1. Radiated emission tests
 2. SIM electrical tests
 3. EMC
 4. Safety
- ✓ New applications will follow the same certification tests.
- ✓ Wavecom product certificates will be made available around the 6th of November, and will be followed by the test reports 2 or 3 weeks later.
- ✓ IMEI numbers allocated by BABT will be accepted by regions covered by PTCRB, but additional certification may be required by US operators if product is to be shipped into these regions.