











WCDMA_3G_RX_TX



CONFIDENTIAL

Jul 03, 2015

PRODUCT ENGINEERING – FABIO MULLER



🔌 QRCT External Licensed					
<u>F</u> ile <u>V</u> iew	FTM <u>C</u> ommand	<u>T</u> ool	<u>W</u> ine		
COM Port 🔻	Mobile Mode Con	trol	Boot		
GSM BER	OffLine	1			
GSM NS APIs	Reset				
GSM NS Contr	FTM				
	OnLine				
1000	Timeout(ms	0	Slot		
Start G	SM		Туре		

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COM Port 🔻	Mobile Mode Control 🔻 Bo			
GSM BER	OffLine			
GSM NS APIs	Reset			
GSM NS Contr	FTM	3		
OnLine				
1000	Slot			
Start GSM				
Spe				



2 – Em "FTM Command" selecionar a ferramenta abaixo:

1 – FTM RF Verification

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<u>F</u> ile <u>V</u> iew	FTM <u>C</u> ommand <u>T</u> ool	<u>W</u> indow Custom <u>A</u> PIs <u>H</u> elp
COM Port 🔻	<u>R</u> F	Mode - ESN HW Ver QMSL Li
FTM RF Verifica	<u>N</u> on-Signaling	•
CDMA GS	IntelliCeiver	
Calu	C <u>o</u> mmon Audio	,
Setup	PMIC	Set Tx Power (dBm*10)
Band I	 <u>В</u> Т	Enable 2200
9612	<u>F</u> M	
1922.4	<u>N</u> FC	
2112.4	<u>C</u> amera	
S	QEuse	Disable _ Sec Cha
S		Get Rx Level (dBm*10)
Eroqua	FTM Sequencer	-250 Rx AGC
Freque	<u>н</u> wтс	•
	FTM RF Verification	1
	FTM AP	
	FFBM	
	ANT	
	Set	



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3 – Setup do WCDMA_TX

- 1 Selecionar à Aba "WCDMA"
- 2 RF Mode Escolher a Banda do Teste
- 3 Set UL Channel Canal de TX do Teste
- 4 Set Tx On
- 5 Enable
- 6 Entrar com a potência desejada multiplicada por 10
- 7 Set TX Power

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<u>F</u> ile <u>V</u> iew FTM <u>C</u>	ommand <u>T</u> ool	<u>W</u> indow Cu	ustom <u>A</u> PIs <u>H</u> e	elp		
COM Port 🔻 Mobile	Mode Control 🔻	Boot Mode 🕶	ESN HW Ver	QMSL Library Mode 🕶	Command Code 🕶	Stat
FTM RF Verification						
CDMA GSM LTE	TD-SCDMA WO	DMA 1				
Setup Band I 9612 1922.4 2112.4 Set Tx On Set Tx Off Frequency Adjus	RF Mode Set UL Cha Tx UHF (MHz) Rx UHF (MHz) A User Adjust Center Freq Enable XO Total Adjust	2 nnel 3	x Set Tx Power (dBr Fable 220 5 x Disable 2 Get Rx Level (dBr -250 R	m*10) 00 Tx Power 6 Sec Chain m*10) tx AGC -798 c	Set Tx Power 7 IBm*10 Get	



4 – Setup do WCDMA_RX

- 1 Selecionar à Aba "WCDMA"
- 2 RF Mode Escolher a Banda do Teste
- 3 Set UL Channel Canal de TX do Teste
- 4 Sec Chain Disable

5 – Get

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<u>F</u> ile <u>V</u> iew FTM <u>C</u> or	nmand <u>T</u> ool	<u>W</u> indow	Custom	<u>A</u> PIs <u>H</u> e	lp		
COM Port 🔻 Mobile M	lode Control 🔻	Boot Mode	 ESN 	HW Ver	QMSL Library Mode 🕶	Command Code 🔻	Sta
FTM RF Verification							
CDMA GSM LTE 1	D-SCDMA W	CDMA 1					
Setup Band I 9612 1922.4 2112.4 Set Tx On Set Tx Off Frequency Adjust	RF Mode Set UL Cha Tx UHF (MHz) Rx UHF (MHz)	2 nnel 3	Tx Set Tx I▼ En Rx Disable Get Rx [-25]	Power (dBn able 220 e Level (dBn D R	n*10) 0 Tx Power Sec Chain 4 n*10) x AGC -798 d	Set Tx Power	5
	Center Freq						
	Enable XO						
	Total Adjust						
Set							



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1 –	FT	Μ	Command
-			

2 – RF

3 – WCDMA

4 – Main Contros

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COM Port 🔻	<u>R</u> F	2 >	<u>C</u> DMA2000		ibrary Mode 🔻 Command
QRCT Debug M Clear Save RXAGC = 213 11:42:39 QLIB_F 11:42:39 QLIB_F RxCtoN = 78865 11:42:40 QLIB_F	<u>N</u> on-Signaling <u>I</u> ntelliCeiver C <u>o</u> mmon <u>A</u> udio <u>P</u> MIC <u>B</u> T	• • •	CDMA <u>S</u> V Chain <u>L</u> TE <u>T</u> D-SCDMA <u>WCDMA</u> <u>G</u> SM <u>M</u> ediaFLO RF MadiaFLO RF	+ + +	Main Controls 4 ICI Cal Dual Carrier
11:42:40 QLIB_F RXAGC = 214 11:42:41 QLIB_F	<u>N</u> FC <u>C</u> amera		<u>M</u> ediarLO Kr MbP2X00 G <u>P</u> S IQ Capture	•	
11:42:41 QLIB_F RXAGC = 212 11:42:48 QLIB_F	QEPROM <u>W</u> LAN	•)		
11:42:48 QLIB_F RXAGC = -427 11:42:49 QLIB_F	FTM <u>S</u> equencer <u>H</u> WTC	•)		
11:42:49 QLIB_F RXAGC = -427	FTM RF Verification FTM AP FFBM AN <u>T</u>	•			



6 – Setup do WCDMA_RX_DIVERSITY

- 1 RF Mode Escolher a Banda do Teste
- 2 Set UL Channel Canal de TX do Teste
- 3 Sec Chain Enable
- 4 Secondary RX
- 5 Get RX AGC Comparar o resultado obtido com um telefone golden

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<u>F</u> ile <u>V</u> iew FTM <u>C</u> ommand <u>T</u> ool <u>W</u> indo	w Custom <u>A</u> PIs <u>H</u> elp
COM Port ▼ Mobile Mode Control ▼ Boot M	ode 🔻 ESN HW Ver 🛛 QMSL Library Mode 🕶
WCDMA RF	
Misc	Primary Rx Rx AGC
Band I 🚽 RF Mode 1	183 Get Rx AGC
9612 Set UL Channel 2	78865320 Get CtoN
1922.4 Tx UHF (MHz)	0 V LNA Range
2112.4 Rx UHF (MHz)	
Enable Sec Chain 3	I 88 Q 80 G 224 Get IM2
4 Set TRK LO Get Synth State	Secondary Rx Rx AGC 5 -244 Get Rx AGC 78865320 Get CtoN LNA Range



Thank you







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