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Sequence Measurement

Radio Communication Analyzer MT8820C/MT8821C

Revision History

Ver. No	Date	Contents	Related product software version
1.00	2015/09	First edition	MX882020C v23.01 MX882120C v30.10

Contents

1. Sequence Measurement Software (MX882020C/MX882120C)

1.1. Specifications

1.1.1. For MT8820B/20C

Chart 1.1.1-1 Specifications for MX882020C Sequence Measurement Software

Item	**Specifications**	
Electrical characteristics	Typical values (typ.) are only for reference and are not guaranteed.	
Amplitude measurement	Frequency	400 to 2700 MHz 3400 to 3800 MHz (when MT8820C-018 is installed)
	Input level	–70 to +35 dBm (Main1)
	Measurement accuracy	±0.5 dB (–20 to +35 dBm), typ. ±0.3 dB (–20 to +35 dBm), ±0.7 dB (–50 to –20 dBm), ±0.9 dB (–60 to –50 dBm), For measurement bandwidth of ≤ 5 MHz ±0.5 dB (–25 to +35 dBm), typ. ±0.3 dB (–25 to +35 dBm), ±0.7 dB (–55 to –25 dBm), ±0.9 dB (–65 to –55 dBm) For measurement bandwidth of ≤ 2 MHz ±0.9 dB (–70 to –55 dBm), 400 to 2700 MHz, after calibration, 10 to 40°C ±0.5 dB (–20 to +35 dBm, 18 to 28°C), typ. ±0.3 dB (–20 to +35 dBm, 18 to 28°C), ±0.7 dB (–50 to –20 dBm), ±0.9 dB (–60 to –50 dBm), For measurement bandwidth of ≤ 5 MHz ±0.5 dB (–25 to +35 dBm, 18 to 28°C), typ. ±0.3 dB (–25 to +35 dBm, 18 to 28°C), ±0.7 dB (–55 to –25 dBm), ±0.9 dB (–65 to –55 dBm), For measurement bandwidth of ≤ 2 MHz ±0.9 dB (–70 to –55 dBm), 3400 to 3800 MHz, after calibration, 10 to 40°C

Chart 1.1.1-1 Specifications for MX882020C Sequence Measurement Software (Cont'd)

Item	**Specifications**	
Amplitude measurement (Cont'd)	Linearity	±0.2 dB (–40 to 0 dB, ≥–50 dBm), ±0.4 dB (–40 to 0 dB, ≥–60 dBm), For measurement bandwidth of ≤ 5 MHz ±0.2 dB (–40 to 0 dB, ≥–55 dBm), ±0.4 dB (–40 to 0 dB, ≥–65 dBm), 400 to 2700 MHz, 10 to 40°C ±0.2 dB (–40 to 0 dB, ≥–50 dBm, 18 to 28°C), ±0.3 dB (–40 to 0 dB, ≥–50 dBm), ±0.4 dB (–40 to 0 dB, ≥–60 dBm), For measurement bandwidth of ≤ 5 MHz ±0.2 dB (–40 to 0 dB, ≥–50 dBm, 18 to 28°C), ±0.3 dB (–40 to 0 dB, ≥–55 dBm), ±0.4 dB (–40 to 0 dB, ≥–65 dBm), 3400 to 3800 MHz, after calibration, 10 to 40°C
	Relative measurement error	Range < 2 dB typ. ±0.10 dB (–40 to 0 dB, ≥ –50 dBm)
RF signal generator	Output frequency	400 to 2700 MHz (1 Hz steps) 3400 to 3800 MHz (1 Hz steps) (when MT8820C-018 installed)

Chart 1.1.1-2 Specifications for MX882020C-001 W-CDMA Measurement Software

Item	**Specifications**	
Electrical characteristics	Typical values (typ.) are only for reference and are not guaranteed.	
Frequency/Modulation measurement	Frequency	400 to 2700 MHz
	Input level	–30 to +35 dBm (Main1)
	Carrier frequency accuracy	±(Set frequency × Reference oscillator accuracy + 10 Hz)
	Modulation accuracy	
	Residual vector error	≤ 2.5% (when one DPCCH and one DPDCH input)
Amplitude measurement	Frequency	400 to 2700 MHz
	Input level	–65 to +35 dBm (Main1)
	Measurement accuracy	±0.5 dB (–25 to +35 dBm), typ. ±0.3 dB (–25 to +35 dBm) ±0.7 dB (–55 to –25 dBm), ±0.9 dB (–65 to –55 dBm), after calibration, 10 to 40°C
	Linearity	±0.2 dB (–40 to 0 dB, ≥ –55 dBm), ±0.4 dB (–40 to 0 dB, ≥ –65 dBm)
	Measurement object	DPCH
Occupied bandwidth	Frequency	400 to 2700 MHz
	Input level	–10 to +35 dBm (Main1)
Adjacent channel leakage power	Frequency	400 to 2700 MHz
	Input level	–10 to +35 dBm (Main1)
	Measurement point	±5 MHz, ±10 MHz
	Measurement range	≥ 50 dB (±5 MHz), ≥ 50 dB (±10 MHz)

Chart 1.1.1-3 Specifications for MX882020C-002 GSM Measurement Software

Item	**Specifications**	
Electrical characteristics	Typical values (typ.) are only for reference and are not guaranteed.	
Frequency/Modulation measurement	Frequency	400 to 2700 MHz
	Input level	–30 to +35 dBm (average power in bursts, Main1)
	Carrier frequency accuracy	±(Set frequency × Reference oscillator accuracy + 10 Hz)
	Modulation accuracy	
	Residual phase error	≤ 0.5 deg. (rms), ≤ 2 deg. (peak) (GMSK)
	Residual EVM	≤ 1.5% (rms) (8PSK)
	Measurement object	Normal burst (GMSK, 8PSK)
Amplitude measurement	Frequency	400 to 2700 MHz
	Input level	–30 to +35 dBm (average power in bursts, Main1)
	Measurement accuracy	±0.5 dB (–20 to +35 dBm), typ. ±0.3 dB (–20 to +35 dBm) ±0.7 dB (–30 to –20 dBm), after calibration, 10 to 40°C
	Linearity	±0.2 dB (–40 to 0 dB, ≥–30 dBm)
	Power measurement range when carrier Off	
		≥ 65 dB (≥–10 dBm) ≥ 45 dB (–30 to –10 dBm)
	Measurement object	Normal burst (GMSK, 8PSK)
Output spectrum measurement (Output RF Spectrum)	Frequency	400 to 2700 MHz
	Input level	–10 to +35 dBm (average power in bursts, Main1)
	Measurement point	±100 kHz, ±200 kHz, ±250 kHz, ±400 kHz, ±600 kHz, ±800 kHz, ±1000 kHz, ±1200 kHz, ±1400 kHz, ±1600 kHz, ±1800 kHz, ±2000 kHz
	Modulation part measurement range	
		Averaged over 10 measurements ≤ –55 dB (≤ 250 kHz offset) ≤ –66 dB (≥ 400 kHz offset)
	Transient part measurement range	
		≤ –57 dB (≥ 400 kHz offset)
	Measurement object	Normal burst (GMSK, 8PSK)

Chart 1.1.1-4 Specifications for MX882020C-003 CDMA2000 Measurement Software

Item	**Specifications**	
Electrical characteristics	Typical values (typ.) are only for reference and are not guaranteed.	
Modulation analysis	Frequency	400 to 2700 MHz
	Input level	–30 to +35 dBm (Main1)
	Carrier frequency accuracy	±(Set frequency × Reference oscillator accuracy + 10 Hz)
	Modulation accuracy	
	Residual Waveform Quality	>0.999
Amplitude measurement	Frequency	400 to 2700 MHz
	Input level	–65 to +35 dBm (Main1)
	Modulation accuracy	(Filtered Power measurement) ±0.5 dB (–25 to +35 dBm), typ. ±0.3 dB (–25 to +35 dBm) ±0.7 dB (–55 to –25 dBm), ±0.9 dB (–65 to –55 dBm), after calibration, 10 to 40°C
	Linearity (Filtered Power measurement)	±0.2 dB (–40 to 0 dB, ≥ –55 dBm), ±0.4 dB (–40 to 0 dB, ≥ –65 dBm)
Code domain power	Measurement available when Reverse RC3, RC4, or EV-DO mode	
	Frequency	400 to 2700 MHz
	Input level	–30 to +35 dBm (Main1)
	Modulation accuracy	±0.2 dB (code Power ≥ –15 dBc) ±0.4 dB (code Power ≥ –23 dBc)
Occupied bandwidth	Frequency	400 to 2700 MHz
	Input level	–10 to +35 dBm (Main1)

Chart 1.1.1-5 Specifications for MX882020C-004 LTE Measurement Software

Item	**Specifications**	
Electrical characteristics	Typical values (typ.) are only for reference and are not guaranteed.	
Frequency/Modulation measurement	Frequency	400 to 2700 MHz 3400 to 3800 MHz (when MT8820C-018 is installed)
	Input level	–40 to +35 dBm (Main1)
	Carrier frequency accuracy	±(Set frequency × Reference oscillator accuracy + 15 Hz)
	Modulation accuracy	
	Residual vector error	≤ 2.5% (400 to 2700 MHz) (3400 to 3800 MHz, 18 to 28°C) (when measurement count is 20) ≤ 3.0% (3400 to 3800 MHz) (when measurement count is 20)
	In-Band Emissions	≤ –40 dB (≥–10 dBm, Allocated RB ≤ 18)
	Measurement object	PUSCH
Amplitude measurement	Frequency	400 to 2700 MHz 3400 to 3800 MHz (when MT8820C-018 ~~is~~ installed)
	Input level	–60 to +35 dBm (Main1)
	Measurement accuracy	±0.5 dB (–20 to +35 dBm), typ. ±0.3 dB (–20 to +35 dBm), ±0.7 dB (–50 to –20 dBm), ±0.9 dB (–60 to –50 dBm), 400 to 2700 MHz, after calibration, 10 to 40°C ±0.5 dB (–20 to +35 dBm, 18 to 28°C), typ. ±0.3 dB (–20 to +35 dBm), ±0.7 dB (–50 to –20 dBm), ±0.9 dB (–60 to –50 dBm), 3400 to 3800 MHz, after calibration, 10 to 40°C
	Linearity	±0.2 dB (–40 to 0 dB, ≥ –50 dBm), ±0.4 dB (–40 to 0 dB, ≥ –60 dBm) 400 to 2700 MHz, after calibration, 10 to 40°C ±0.2 dB (–40 to 0 dB, ≥ –50 dBm, 18 to 28°C), ±0.3 dB (–40 to 0 dB, ≥ –50 dBm), ±0.4 dB (–40 to 0 dB, ≥ –60 dBm), 3400 to 3800 MHz, after calibration, 10 to 40°C
	Relative measurement error	Range< 2 dB typ.±0.10 dB (–40 to 0 dB, ≥ –50 dBm)
	Measurement object	PUSCH

Chart 1.1.1-5 Specifications for MX882020C LTE FDD Measurement Software (Cont'd)

Item	Specifications	
Occupied bandwidth	Frequency	400 to 2700 MHz 3400 to 3800 MHz (when MT8820C-018 is installed)
	Input level	–10 to +35 dBm (Main1)
Adjacent channel leakage power	Frequency	400 to 2700 MHz 3400 to 3800 MHz (when MT8820C-018 is installed)
	Input level	–10 to +35 dBm (Main1)
	Measurement point	E-UTRA ACLR1, UTRA ACLR1, UTRA ACLR2
	Measurement range	≥ 45 dB (E-UTRA ACLR1), ≥ 50 dB (UTRA ACLR1), ≥ 50 dB (UTRA ACLR2)
	Frequency	400 to 2700 MHz 3400 to 3800 MHz (when MT8820C-018 is installed)
	Input level	–10 to +35 dBm (Main1)

Chart 1.1.1-6 Specifications for MX882020C-005 TD-SCDMA Measurement Software

Item	Specifications	
Electrical characteristics	Typical values (typ.) are only for reference and are not guaranteed.	
Frequency/Modulation measurement	Frequency	400 to 2700 MHz
	Input level	–30 to +35 dBm (Main1)
	Carrier frequency accuracy	±(Set frequency × Reference oscillator accuracy + 10 Hz)
	Modulation accuracy	
	Residual vector error	≤ 2.5% (Single code)
Amplitude measurement	Frequency	400 to 2700 MHz
	Input level	–70 to +35 dBm (Main1)
	Measurement accuracy	±0.5 dB (–25 to +35 dBm), typ. ±0.3 dB (–25 to +35 dBm) ±0.7 dB (–55 to –25 dBm), ±0.9 dB (–70 to –55 dBm), after calibration, 10 to 40°C
	Linearity	±0.2 dB (–40 to 0 dB, ≥–55 dBm), ±0.4 dB (–40 to 0 dB, ≥–65 dBm)
	Measurement object	DPCH
Occupied bandwidth	Frequency	400 to 2700 MHz
	Input level	–10 to +35 dBm (Main1)
Adjacent channel leakage power	Frequency	400 to 2700 MHz
	Input level	–10 to +35 dBm (Main1)
	Measurement point	±1.6 MHz, ±3.2 MHz
	Measurement range	≥ 50 dB (±1.6 MHz), ≥ 50 dB (±3.2 MHz)

1.1.2. For MT8821C

Chart 1.1.2-1 Specifications for MX882120C Sequence Measurement Software

Item	Specifications	
Electrical characteristics	Typical values (typ.) are only for reference and are not guaranteed.	
Amplitude measurement	Frequency	400 to 3800 MHz 3800 to 5000 MHz (when MT8821C-019 is installed) For the frequencies below 500 MHz, only the following range meets the specifications: 452.5 to 457.5 MHz (LTE OperatingBand31) 410.000 to 419.975 MHz (CDMA2000 Band Class 5, 11) 450.000 to 459.990 MHz (CDMA2000 Band Class 5, 11) 479.000 to 483.480 MHz (CDMA2000 Band Class 5, 11) 410.2 to 419.8 MHz (Band T-GSM410) 450.4 to 457.6 MHz (Band GSM450) 478.8 to 486.0 MHz (Band GSM480)
	Input level	–70 to +35 dBm (Main1/2)
	Measurement accuracy	±0.5 dB (–20 to +35 dBm), typ. ±0.3 dB (–20 to +35 dBm), ±0.7 dB (–50 to –20 dBm), ±0.9 dB (–60 to –50 dBm) For measurement bandwidth of ≤ 5 MHz ±0.5 dB (–30 to +35 dBm), typ. ±0.3 dB (–30 to +35 dBm), ±0.7 dB (–55 to –30 dBm), ±0.9 dB (–65 to –55 dBm) For measurement bandwidth of ≤2 MHz ±0.5 dB (–30 to +35 dBm), typ. ±0.3 dB (–30 to +35 dBm), ±0.7 dB (–55 to –30 dBm), ±0.9 dB (–70 to –55 dBm), 400 MHz ≤ freq. ≤ 3800 MHz, after calibration, 10 to 40°C ±0.7 dB (–20 to +35 dBm), ±0.9 dB (–50 to –20 dBm), ±1.1 dB (–60 to –50 dBm), 3800 MHz < freq. ≤ 5000 MHz, after calibration, 20 to 30°C

Chart 1.1.2-1 Specifications for MX882120C Sequence Measurement Software (Cont'd)

Item	Specifications	
Amplitude measurement (Cont'd)	Linearity	±0.2 dB (–40 to 0 dB, ≥ –50 dBm), ±0.4 dB (–40 to 0 dB, ≥ –60 dBm) For measurement bandwidth of ≤ 5 MHz ±0.2 dB (–40 to 0 dB, ≥ –55 dBm), ±0.4 dB (–40 to 0 dB, ≥ –65 dBm), 400 MHz ≤ freq. ≤ 3800 MHz, 10 to 40°C ±0.2 dB (–40 to 0 dB, ≥ –50 dBm), ±0.4 dB (–40 to 0 dB, ≥ –60 dBm), 3800 MHz < freq. ≤ 5000 MHz, 10 to 40°C
	Relative measurement error	 Range <2 dB typ. ±0.10 dB (–40 to 0 dB, ≥ –50 dBm)
RF signal generator	Output frequency	400 to 3800 MHz (1 Hz steps) 3800 to 6000 MHz (1 Hz steps) (when MT8821C-019 is installed)
	Output level	
	Main output	–140.0 to –10.0 dBm (Modulation Off) –142.0 to –12.0 dBm (Modulation On)
	AUX output	–125.0 to +5.0 dBm (Modulation Off) –127.0 to +3.0 dBm (Modulation On)

Chart 1.1.2-2 Specifications for MX882120C-001 W-CDMA Measurement Software

Item	**Specifications**	
Electrical characteristics	Typical values (typ.) are only for reference and are not guaranteed.	
Frequency/Modulation measurement	Frequency	400 to 2700 MHz For the frequencies below 500 MHz, only the following range meets the specifications: 452.5 to 457.5 MHz (LTE Operating Band 31)
	Input level	–30 to +35 dBm (Main1/2)
	Carrier frequency accuracy	±(Set frequency × Reference oscillator accuracy + 10 Hz)
	Modulation accuracy	
	Residual vector error	≤ 2.5% (when one DPCCH and one DPDCH are input)
Amplitude measurement	Frequency	400 to 2700 MHz For the frequencies below 500 MHz, only the following range meets the specifications: 452.5 to 457.5 MHz (LTE Operating Band 31)
	Input level	–65 to +35 dBm (Main1/2)
	Measurement accuracy	±0.5 dB (–30 to +35 dBm), typ. ±0.3 dB (–30 to +35 dBm), ±0.7 dB (–55 to –30 dBm), ±0.9 dB (–65 to –55 dBm) after calibration, 10 to 40°C
	Linearity	±0.2 dB (–40 to 0 dB, ≥ –50 dBm), ±0.4 dB (–40 to 0 dB, ≥ –60 dBm) For measurement bandwidth of ≤ 5 MHz ±0.2 dB (–40 to 0 dB, ≥ –55 dBm), ±0.4 dB (–40 to 0 dB, ≥ –65 dBm), 10 to 40°C
	Measurement object	DPCH
Occupied bandwidth	Frequency	400 to 2700 MHz For the frequencies below 500 MHz, only the following range meets the specifications: 452.5 to 457.5 MHz (LTE Operating Band 31)
	Input level	–10 to +35 dBm (Main1/2)
Adjacent channel leakage power	Frequency	400 to 2700 MHz For the frequencies below 500 MHz, only the following range meets the specifications: 452.5 to 457.5 MHz (LTE Operating Band 31)
	Input level	–10 to +35 dBm (Main1/2)
	Measurement range	≥ 50 dB (±5 MHz), ≥ 55 dB (±10 MHz)

Chart 1.1.2-3 Specifications for MX882120C-002 GSM Measurement Software

Item	**Specifications**	
Electrical characteristics	Typical values (typ.) are only for reference and are not guaranteed.	
Frequency/Modulation measurement	Frequency	400 to 2700 MHz For the frequencies below 500 MHz, only the following range meets the specifications: 410.2 to 419.8 MHz (Band T-GSM410) 450.4 to 457.6 MHz (Band GSM450) 478.8 to 486 MHz (Band GSM480)
	Input level	–30 to +35 dBm (average power in bursts, Main1/2)
	Carrier frequency accuracy	±(Set frequency × Reference oscillator accuracy + 10 Hz)
	Modulation accuracy	
	Residual phase error	≤ 0.5 deg. (rms), ≤ 2 deg. (peak) (GMSK)
	Residual EVM	≤ 1.5% (rms) (8PSK)
	Measurement object	Normal burst (GMSK, 8PSK)
Amplitude measurement	Frequency	400 to 2700 MHz For the frequencies below 500 MHz, only the following range meets the specifications: 410.2 to 419.8 MHz (Band T-GSM410) 450.4 to 457.6 MHz (Band GSM450) 478.8 to 486 MHz (Band GSM480)
	Input level	–30 to +35 dBm (average power in bursts, Main1/2)
	Measurement accuracy	±0.5 dB (–30 to +35 dBm), typ. ±0.3 dB (–30 to +35 dBm), after calibration, 10 to 40°C
	Linearity	±0.2 dB (–40 to 0 dB, ≥ –30 dBm), 10 to 40°C
	Power measurement range when carrier Off	
		≥65 dB (≥–10 dBm) ≥45 dB (–30 to –10 dBm)
	Measurement object	Normal burst (GMSK, 8PSK)

Chart 1.1.2-3 Specifications for MX882120C-002 GSM Measurement Software (Cont'd)

Item	Specifications	
Output Spectrum Measurement (Output RF Spectrum)	Frequency	400 to 2700 MHz For the frequencies below 500 MHz, only the following range meets the specifications: 410.2 to 419.8 MHz (Band T-GSM410) 450.4 to 457.6 MHz (Band GSM450) 478.8 to 486 MHz (Band GSM480)
	Input level	–10 to +35 dBm (average power in bursts, Main1/2)
	Measurement point	±100 kHz, ±200 kHz, ±250 kHz, ±400 kHz, ±600 kHz, ±800 kHz, ±1000 kHz, ±1200 kHz, ±1400 kHz, ±1600 kHz, ±1800 kHz, ±2000 kHz
	Modulation part measurement range	Averaged over 10 measurements ≤ –55 dB (≤ 250 kHz offset) ≤ –66 dB (≥ 400 kHz offset)
	Transient part measurement range	≤ –57 dB (≥ 400 kHz offset)
	Measurement object	Normal burst (GMSK, 8PSK)

Chart 1.1.2-4 Specifications for MX882120C-003 CDMA2000 Measurement Software

Item	**Specifications**	
Electrical characteristics	Typical values (typ.) are only for reference and are not guaranteed.	
Frequency/Modulation measurement	Frequency	400 to 2700 MHz For the frequencies below 500 MHz, only the following range meets the specifications: 410.000 to 419.975 MHz (CDMA2000 Band Class 5,11) 450.000 to 459.990 MHz (CDMA2000 Band Class 5,11) 479.000 to 483.480 MHz (CDMA2000 Band Class 5,11)
	Input level	–30 to +35 dBm (Main1/2)
	Carrier frequency accuracy	±(Set frequency × Reference oscillator accuracy + 10 Hz)
	Modulation accuracy Residual Waveform Quality	> 0.999
Amplitude measurement	Frequency	400 to 2700 MHz For the frequencies below 500 MHz, only the following range meets the specifications: 410.000 to 419.975 MHz (CDMA2000 Band Class 5,11) 450.000 to 459.990 MHz (CDMA2000 Band Class 5,11) 479.000 to 483.480 MHz (CDMA2000 Band Class 5,11)
	Input level	–65 to +35 dBm (Main1/2)
	Measurement accuracy	(Filtered Power measurement) ±0.5 dB (–30 to +35 dBm), typ. ±0.3 dB (–30 to +35 dBm), ±0.7 dB (–55 to –30 dBm), ±0.9 dB (–65 to –55 dBm) after calibration, 10 to 40°C
	Linearity	(Filtered Power measurement) ±0.2 dB (–40 to 0 dB, ≥ –55 dBm), ±0.4 dB (–40 to 0 dB, ≥–65 dBm), 10 to 40°C

Chart 1.1.2-4 Specifications for MX882120C-003 CDMA2000 Measurement Software (Cont'd)

Item	**Specifications**	
Code Domain Power	Measurement available when Reverse RC3, RC4, or EV-DO mode	
	Frequency	400 to 2700 MHz For the frequencies below 500 MHz, only the following range meets the specifications: 410.000 to 419.975 MHz (CDMA2000 Band Class 5,11) 450.000 to 459.990 MHz (CDMA2000 Band Class 5,11) 479.000 to 483.480 MHz (CDMA2000 Band Class 5,11)
	Input level	–30 to +35 dBm (Main1/2)
	Modulation accuracy	±0.2 dB (code Power ≥ –15 dBc) ±0.4 dB (code Power ≥ –23 dBc)
Occupied bandwidth	Frequency	400 to 2700 MHz For the frequencies below 500 MHz, only the following range meets the specifications: 410.000 to 419.975 MHz (CDMA2000 Band Class 5,11) 450.000 to 459.990 MHz (CDMA2000 Band Class 5,11) 479.000 to 483.480 MHz (CDMA2000 Band Class 5,11)
	Input level	–10 to +35 dBm (Main1/2)

Chart 1.1.2-5 Specifications for MX882120C-004 LTE Measurement Software

Item	**Specifications**	
Electrical characteristics	Typical values (typ.) are only for reference and are not guaranteed.	
Frequency/Modulation measurement	Frequency	400 to 3800 MHz 3800 to 6000 MHz (when MT8821C-019 is installed) For the frequencies below 500 MHz, only the following range meets the specifications: 452.5 to 457.5 MHz (LTE Operating Band 31)
	Input level	–40 to +35 dBm (Main1/2)
	Carrier frequency accuracy	±(Set frequency × Reference oscillator accuracy + 15 Hz)
	Modulation accuracy	
	Residual vector error	≤ 2.5% (400 MHz ≤ freq. ≤ 3800 MHz) (when measurement count is 20) For the frequencies below 500 MHz, only the following range meets the specifications: 452.5 to 457.5 MHz (LTE Operating Band 31) ≤ 3.5% (3800 MHz < freq. ≤ 5000 MHz) (when measurement count is 20)
	In-Band Emissions	≤ –40 dB (≥ –10 dBm, Allocated RB ≤ 18)
	Measurement object	PUSCH

Chart 1.1.2-5 Specifications for MX882120C-004 LTE Measurement Software (Cont'd)

Item	**Specifications**	
Amplitude measurement	Frequency	400 to 3800 MHz 3800 to 6000 MHz (when MT8821C-019 is installed) For the frequencies below 500 MHz, only the following range meets the specifications: 452.5 to 457.5 MHz (LTE Operating Band 31)
	Input level	–60 to +35 dBm (Main1/2)
	Measurement accuracy	±0.5 dB (–20 to +35 dBm), typ. ±0.3 dB (–20 to +35 dBm), ±0.7 dB (–50 to –20 dBm), ±0.9 dB (–60 to –50 dBm), 400 MHz ≤ freq. ≤ 3800 MHz, after calibration, 10 to 40°C ±0.7 dB (–20 to +35 dBm), ±0.9 dB (–50 to –20 dBm), ±1.1 dB (–60 to –50 dBm), 3800 MHz < freq. ≤ 5000 MHz, after calibration, 20 to 30°C
	Linearity	±0.2 dB (–40 to 0 dB, ≥–50 dBm), ±0.4 dB (–40 to 0 dB, ≥–60 dBm), 400 MHz ≤ freq. ≤ 3800 MHz, 10 to 40°C ±0.2 dB (–40 to 0 dB, ≥ –50 dBm), ±0.4 dB (–40 to 0 dB, ≥ –60 dBm), 3800 MHz < freq. ≤ 5000 MHz, 10 to 40°C
	Measurement object	PUSCH

Chart 1.1.2-5 Specifications for MX882120C-004 LTE Measurement Software (Cont'd)

Item	Specifications	
Occupied bandwidth	Frequency	400 to 3800 MHz 3800 to 5000 MHz (when MT8821C-019 is installed) For the frequencies below 500 MHz, only the following range meets the specifications: 452.5 to 457.5 MHz (LTE Operating Band 31)
	Input level	–10 to +35 dBm (Main1/2)
	Channel bandwidth	1.4 MHz, 3 MHz, 5 MHz (452.5 MHz ≤ UL frequency ≤ 457.5 MHz) 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz (500 MHz ≤ UL frequency)
Adjacent channel leakage power	Frequency	400 to 3800 MHz 3800 to 5000 MHz (when MT8821C-019 is installed) For the frequencies below 500 MHz, only the following range meets the specifications: 452.5 to 457.5 MHz (LTE Operating Band 31)
	Input level	–10 to +35 dBm (Main1/2)
	Measurement range	≥ 45 dB (E-UTRA ACLR1), ≥ 50 dB (UTRA ACLR1), ≥ 55 dB (UTRA ACLR2) 400 to 5000 MHz For the frequencies below 500 MHz, only the following range meets the specifications: 452.5 to 457.5 MHz (LTE Operating Band 31)
	Channel bandwidth	1.4 MHz, 3 MHz, 5 MHz (452.5 MHz ≤ UL frequency ≤ 457.5 MHz) 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz (500 MHz ≤ UL frequency)
Spectrum Emission Mask	Frequency	400 to 3800 MHz 3800 to 5000 MHz (when MT8821C-019 is installed) For the frequencies below 500 MHz, only the following range meets the specifications: 452.5 to 457.5 MHz (LTE Operating Band 31)
	Input level	–10 to +35 dBm (Main1/2)
	Channel bandwidth	1.4 MHz, 3 MHz, 5 MHz (452.5 MHz ≤ UL frequency ≤ 457.5 MHz) 1.4 MHz, 3 MHz, 5 MHz, 10 MHz, 15 MHz, 20 MHz (500 MHz ≤ UL frequency)

Chart 1.1.2-6 Specifications for MX882120C-005 TD-SCDMA Measurement Software

Item	**Specifications**	
Electrical characteristics	Typical values (typ.) are only for reference and are not guaranteed.	
Frequency/Modulation measurement	Frequency	400 to 2700 MHz For the frequencies below 500 MHz, only the following range meets the specifications: 452.5 to 457.5 MHz (LTE Operating Band 31)
	Input level	–30 to +35 dBm (Main1/2)
	Carrier frequency accuracy	±(Set frequency × Reference oscillator accuracy + 10 Hz)
	Modulation accuracy Residual vector error	≤ 2.5% (Single code)
Amplitude measurement	Frequency	400 to 2700 MHz For the frequencies below 500 MHz, only the following range meets the specifications: 452.5 to 457.5 MHz (LTE Operating Band 31)
	Input level	–70 to +35 dBm (Main1/2)
	Measurement accuracy after calibration, 10 to 40°C	±0.5 dB (–30 to +35 dBm), typ. ±0.3 dB (–30 to +35 dBm), ±0.7 dB (–55 to –30 dBm), ±0.9 dB (–70 to –55 dBm),
	Linearity	±0.2 dB (–40 to 0 dB, ≥ –55 dBm), ±0.4 dB (–40 to 0 dB, ≥ –65 dBm), 10 to 40°C
	Measurement object	DPCH
Occupied bandwidth	Frequency	400 to 2700 MHz For the frequencies below 500 MHz, only the following range meets the specifications: 452.5 to 457.5 MHz (LTE Operating Band 31)
	Input level	–10 to +35 dBm (Main1/2)
Adjacent channel leakage power	Frequency	400 to 2700 MHz For the frequencies below 500 MHz, only the following range meets the specifications: 452.5 to 457.5 MHz (LTE Operating Band 31)
	Input level	–10 to +35 dBm (Main1/2)
	Measurement point	±1.6 MHz, ±3.2 MHz
	Measurement range	≥ 50 dB (±1.6 MHz), ≥ 55 dB (±3.2 MHz)

1.2. Measurement Specification Table (C.S.0011-C)

	Item	Comment	
3	**CDMA RECEIVER MINIMUM STANDARDS**		
3.1	**Frequency Coverage Requirements**	Support Band Class 0-12, 14, 15, 18, 19	△
3.2	**Acquisition Requirements**		X
3.3	**Forward Common Channel Demodulation Performance**		X
3.4	**Forward Traffic Channel Demodulation Performance**		
3.4.1	Demodulation of Forward Fundamental Channel in Additive White Gaussian Noise		√√
3.4.2	Demodulation of Forward Fundamental Channel in Multipath Fading Channel	Requires Fading Simulator	√
3.4.3	Demodulation of Forward Fundamental Channel During Soft Handoff		X
3.4.4	Decision of Power Control Bit for Channels Belonging to Different Power Control Sets During Soft Handoff		X
3.4.5	Decision of Power Control Bit for Channels Belonging to the Same Power Control Set		X
3.4.6	Demodulation of Power Control Subchannel During Soft Handoff		X
3.4.7	Demodulation of Forward Traffic Channel in Multipath Fading Channel with Closed Loop Power Control (FPC_MODE = '000')		X
3.4.8	Demodulation of Forward Traffic Channel in Multipath Fading Channel with Closed Loop Power Control (FPC_MODE = '010')		X
3.4.9	Demodulation of Forward Traffic Channel in Multipath Fading Channel with Outer Loop Power Control and Closed Loop Power Control (FPC_MODE = '000', '001' and '010')		X
3.4.10	Demodulation of Forward Traffic Channel in Multipath Fading Channel with Closed Loop Power Control (FPC_MODE = '000') and Transmit Diversity (OTD or STS)		X
3.4.11	Demodulation of Forward Traffic Channel in Multipath Fading Channel with Closed Loop Power Control (FPC_MODE = '010') and Transmit Diversity (OTD or STS)		X
3.4.12	Demodulation of Power Control Subchannel During Reverse Pilot Channel Gating		X
3.4.13	Demodulation of Power Control Subchannel During Reverse Fundamental Channel Gating		X
3.4.14	Demodulation of Forward Packet Data Channel in Additive White Gaussian Noise		X
3.4.15	Demodulation of Forward Packet Data Channel in Multipath Fading Channel with no Power Control		X
3.5	**Receiver Performance**		
3.5.1	Receiver Sensitivity and Dynamic Range		√√
3.5.2	Single Tone Desensitization	Requires SG	√
3.5.3	Intermodulation Spurious Response Attenuation		X
3.5.4	Adjacent Channel Selectivity		X
3.5.5	Receiver Blocking Characteristics		X
3.6	**Limitations of Emmisions**		
3.6.1	Conducted Spurious Emissions		X
3.6.2	Radiated Spurious Emissions		X

3.7	**Supervision**		
3.7.1	Paging Channel or Forward Common Control Channel		X
3.7.2	Forward Traffic Channel		X
3.7.3	Forward Traffic Channel with Power Control Subchannel on CPCCH		X
4	**CDMA TRANSMITTER MINIMUM STANDARDS**		
4.1	Frequency Accuracy		√√
4.2	**Handoff**		
4.2.1	CDMA to CDMA Hard Handoff	Only Hard Handoff Cannot make the required timing measurement.	△
4.2.2	Transmit Power after Hard Handoff		X
4.3	**Moduration Requirements**		
4.3.1	Time Reference		∆
4.3.2	Reverse Pilot Channel to Code Channel Time Tolerance		X
4.3.3	Reverse Pilot Channel to Code Channel Phase Tolerance		X
4.3.4	Waveform Quality and Frequency Accuracy		√√
4.3.5	Code Domain Power		√√
4.4	**RF Output Power Requirements**		
4.4.1	Range of Open Loop Output Power	Except Enhanced Access Channel	△
4.4.2	Time Response of Open Loop Power Control		√√
4.4.3	Access Probe Output Power	Except Enhanced Access Channel	△
4.4.4	Range of Closed Loop Power Control	Only Power Control	X
4.4.5	Maximum RF Output Power		√√
4.4.6	Minimum Controlled Output Power		√√
4.4.7	Standby Output Power and Gated Output Power	Expect Standby Output Power.	△
4.4.8	Power Up Function Output Power		X
4.4.9	Code Channel to Reverse Pilot Channel Output Power Accuracy	Except Enhanced Access Channel Header, Enhanced Access Channel Data and Reverse Common Control Channel Data.	△
4.4.10	Reverse Pilot Channel Transmit Phase Discontinuity		v
4.4.11	Reverse Traffic Channel Output Power During Changes in Data Rate		X
4.5	**Limitations on Emmisions**		
4.5.1	Conducted Spurious Emissions		√
4.5.2	Radiated Spurious Emissions		X
4.5.3	Occupied Bandwidth		√√

√√**:** Supported | √**:** Requires external equipment (SPA or SG) | △**:** Partiall y Support | X**:** No Support

1.3. Fundamental Measurement

1.3.1. TX Power Mode

Table 1.3.1-2 shows an example of the remote commands for executing the measurement sequence under the measurement conditions listed in Table 1.3.1-1.

Table 1.3.1-1 Measurement Conditions

Parameter	Specifications	
Test condition 1	Frequency	DL 2140 MHz, UL 1950 MHz
	Level	DL –80 to –45 dBm (+1 dB/step) UL 24 dBm (UE output +24 to –11 dBm)
	Trigger	Power
	Step time	W-CDMA 1 slot (10/15 ms)
	Bandwidth	W-CDMA (3.84 MHz RRC Filter)
	Number of steps	45
	Number of measurement steps	36
Test condition 2	Frequency	DL 2150 MHz, UL 1960 MHz
	Level	DL –80 to –45 dBm (+1 dB/step) UL 24 dBm (UE output +24 to –11 dBm)
	Trigger	Freerun
	Step time	Same as measurement condition 1
	Bandwidth	
	Number of steps	
	Number of measurement steps	

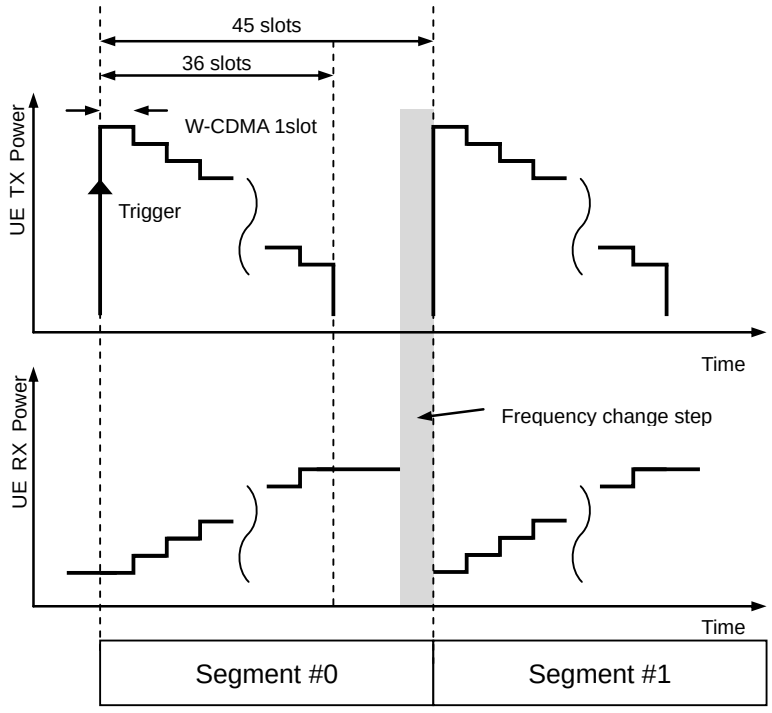

Table 1.3.1-2 Example of Remote Commands

```
/*** ----- TX Power Measurement Condition ----- ***/
/* Condition #0 */
TXPWR_STIME 0,WCDMA                    // Step Time WCDMA Slot (10/15 ms)
TXPWR_SCOUNT 0,36                      // Step Count 36 for Measurement
TXPWR_BW 0,WCDMA                       // Measurement Bandwidth WCDMA
TXPWR_MW 0,10,80                       // Measurement Window 80% with Offset 10%
TXPWR_OLVL 0,PAT0                              // Output Level Control PAT0
TXPWR_OPAT0 PAT0,-80,-79,-78,-77,-76,-75,-74,-73,-72,-71,-70,-69,-68,-67,-66,-65,
-64,-63,-62,-61,-60,-59,-58,-57,-56,-55,-54,-53,-52,-51,-50,-49,-48,-47,-46,-45
                                       // Output Level Pattern (PAT0)
/*** ----- Sequence Table ----- ***/
SEQTBL 0                                       // Active Sequence Table Number
/* Segment #0 */
SEQTRX 0,1950.0,24.0,2140.0,-80.0,NC   // TRX Frequency and Level
SEQTRG 0,PWR,RISE,-20.0,0.0            // Trigger
SEQMEAS 0,TXP,45,0                             // TX Power Mode for 45 steps with Condition #0
/* Segment #1 */
SEQTRX 1,1960.0,24.0,2150.0,-80.0,NC   // TRX Frequency and Level
SEQTRG 1,FREERUN,RISE,-20.0,0                  // Trigger
SEQMEAS 1,TXP,45,0                             // TX Power Mode for 45 steps with Condition #0
*OPC?
/*** ----- Starting Sequence Measurement ----- ***/
SEQTBL 0                                       // Active Sequence Table Number
SEQCTRL 0,1                            // Execution : Start Segment #0, Stop Segment #1
SNGLS                                  // Initiation of Sequence Measurement
*OPC?                                  // Confirmation of trigger ready
/* UE will start sequence here */
/*** ----- Result ----- ***/
/* Segment #0 */
/* Waiting for Completion */
do{
        status[0] = response( “SEQSEGSTAT? 0” )
}while( status[0]==9 )                         // 9 means the segment is not completed
if( status[0]==0 ){                    // 0 means the segment has no error
        TXPWR_PWR? 0                   // TX Power Result
}
/* Segment #1 */
/* Waiting for Completion */
do{
        status[1] = response( “SEQSEGSTAT? 1” )
}while( status[1]==9 )                 // 9 means the segment is not completed
if( status[1]==0 ){                    // 0 means the segment has no error
        TXPWR_PWR? 1                   // TX Power Result
}
```

1.3.2. IQ Power and Phase Mode

Table 1.3.2-2 shows an example of the remote commands for executing the measurement sequence under the measurement conditions listed in Table 1.3.2-1.

Table 1.3.2-1 Measurement Conditions

Parameter	Specifications	
Test condition 1	Frequency	UL 890.2 MHz
	Level	DL Off, UL 24 dBm
	Trigger	Power
	Step time	200 μs
	Bandwidth	30 kHz
	Number of steps	30
	Number of measurement steps	20
Test condition 2	Frequency	UL 1710.2 MHz
	Level	DL Off, UL 24 dBm
	Trigger	Same as measurement condition 1
	Step time	
	Bandwidth	
	Number of steps	
	Number of measurement steps	

Table 1.3.2-2 Example of Remote Commands

```
/*** ----- IQPP Measurement Condition ----- ***/
/* Condition #0 */
IQPP_STIME 0,200                        // Step time 200 us
IQPP_SCOUNT 0,20                        // Step count 20
IQPP_BW 0,30KHZ                         // Measurement bandwidth 30 kHz
IQPP_MW 0,25,50                         // Measurement window 50% with offset 25%
/*** ----- Sequence Table ----- ***/
SEQTBL 0                                        // Active Sequence Table Number
/* Segment #0 */
SEQTRX 0,890.2,24.0,2140.0,-80.0,OFF    // TRX Frequency and Level
SEQTRG 0,PWR,RISE,-20.0,0.0             // Trigger
SEQMEAS 0,IQPP,30,0                             // IQPP Mode for 30 steps with Condition #0
/* Segment #1 */
SEQTRX 1,1710.2,24.0,2140.0,-80.0,OFF   // TRX Frequency and Level
SEQTRG 1,PWR,RISE,-20.0,0               // Trigger
SEQMEAS 1,IQPP,30,0                             // IQPP Mode for 30 steps with Condition #0
*OPC?
/*** ----- Starting of Sequence Measurement ----- ***/
SEQTBL 0                                        // Active Sequence Table Number
SEQCTRL 0,1                             // Execution : Start Segment #0, Stop Segment #1
SNGLS                                   // Initiation of Sequence Measurement
*OPC?                                   // Confirmation of trigger ready
/* UE will start sequence here */
/*** ----- Result ----- ***/
/* Segment #0 */
/* Waiting for Completion */
do{
        status[0] = response( “SEQSEGSTAT? 0” )
}while( status[0]==9 )                          // 9 means the segment is not completed
if( status[0]==0 ){                     // 0 means the segment has no error
        IQPP_PWR? 0                     // IQ Power Result
        IQPP_PHASE? 0                   // IQ Phase Result
}
/* Segment #1 */
/* Waiting for Completion */
do{
        status[1] = response( “SEQSEGSTAT? 1” )
}while( status[1]==9 )                  // 9 means the segment is not completed
if( status[1]==0 ){                     // 0 means the segment has no error
        IQPP_PWR? 1                     // IQ Power Result
        IQPP_PHASE? 1                   // IQ Phase Result
}
```

1.3.3. IQ Capture Mode

Table 1.3.3-2 shows an example of the remote commands for executing the measurement sequence under the measurement conditions listed in Table 1.3.3-1.

Table 1.3.3-1 Measurement Conditions

Parameter	Specifications	
Test condition 1	Frequency	UL 890.2 MHz
	Level	DL Off, UL 24 dBm
	Trigger	Power
	Time span	10 ms
	Bandwidth	20 MHz
Test condition 2	Frequency	UL 1710.2 MHz
	Level	DL Off, UL 24 dBm
	Trigger	Same as measurement condition 1
	Step time	
	Bandwidth	

Table 1.3.3-2 Example of Remote Commands

```
/*** ----- IQCAP Measurement Condition ----- ***/
/* Condition #0 */
IQCAP_TSPAN 0,10000                    // Time span 10 ms
IQCAP_BW 0,20MHZ                       // Capture bandwidth 20 MHz
/*** ----- Sequence Table ----- ***/
SEQTBL 0                                        // Active Sequence Table Number
/* Segment #0 */
SEQTRX 0,890.2,24.0,2140.0,-80.0,OFF   // TRX Frequency and Level
SEQTRG 0,PWR,RISE,-20.0,0.0            // Trigger
SEQMEAS 0,IQCAP,2,0                    // IQCAP Mode with Condition #0
/* Segment #1 */
SEQTRX 1,1710.2,24.0,2140.0,-80.0,OFF  // TRX Frequency and Level
SEQTRG 1,PWR,RISE,-20.0,0              // Trigger
SEQMEAS 1,IQCAP,2,0                    // IQCAP Mode with Condition #0
*OPC?
/*** ----- Starting of Sequence Measurement ----- ***/
SEQTBL 0                                        // Active Sequence Table Number
SEQCTRL 0,1                            // Execution : Start Segment #0, Stop Segment #1
SNGLS                                  // Initiation of Sequence Measurement
*OPC?                                  // Confirmation of trigger ready
/* UE will start sequence here */
/*** ----- Result ----- ***/
/* Segment #0 */
/* Waiting for Completion */
do{
        status[0] = response( “SEQSEGSTAT? 0” )
}while( status[0]==9 )                          // 9 means the segment is not completed
if( status[0]==0 ){                    // 0 means the segment has no error
        IQCAP_NUM? 0                   // Number of capture samples (pairs of I and Q)
        IQCAP_RATE? 0                  // Capture sampling rate
        IQCAP_BIN? 0,0,307200                   // Captured IQ array as binary float value
}
/* Segment #1 */
/* Waiting for Completion */
do{
        status[1] = response( “SEQSEGSTAT? 1” )
}while( status[1]==9 )                 // 9 means the segment is not completed
if( status[1]==0 ){                    // 0 means the segment has no error
        IQCAP_NUM? 1                   // Number of capture samples (pairs of I and Q)
        IQCAP_RATE? 1                  // Capture sampling rate
        IQCAP_BIN? 1,0,307200                   // Captured IQ array as binary float value
}
```

1.4. MX882020C-001/MX882120C-001 W-CDMA Measurement Software

Examples of remote commands in the W-CDMA measurement mode are as follows.

1.4.1. Control Command Example

Table 1.4.1-2 shows an example of the remote commands for executing the measurement sequence under the measurement conditions listed in Table 1.4.1-1.

Table 1.4.1-1 Measurement Conditions

Parameter	Specifications	
Frequency	BAND I，DL 2140.0 MHz，UL 1950 MHz	
Measurement condition 1	Level	DL –80 dBm，UL 24 dBm
	Number of steps	30
	Measurement items and number of averaging	TX Power (Number of averaging: 20) SEM (Number of averaging: 25) Frequency error and EVM (Number of averaging: 25)
Measurement condition 2	Level	DL –80 dBm，UL –20 dBm
	Number of steps	15
	Measurement items and number of averaging	Filtered Power (Number of averaging: 10) EVM (Number of averaging: 10)
Measurement condition 3	Level	DL –80 dBm，UL –56 dBm
	Number of steps	30
	Measurement items and number of averaging	Filtered Power (Number of averaging: 20)

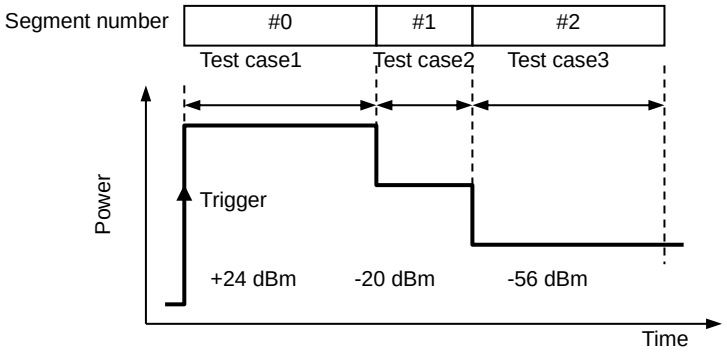

Table 1.4.1-2 Example of Remote Commands

```
/* ----- Common Parameter ----- */
PACKAGE PAC1                          // DL ARB waveform package
DLPAT PAT0                            // DL ARB waveform pattern
MOD ON                                        // Modulation On
*OPC?
/* ----- WCDMA System Parameter ----- */
WCDMA_SCRCODE 000000
WCDMA_LSCODESEARCH OFF
*OPC?
/*** ----- WCDMA Measurement Condition ----- ***/
/* Condition #0 */
WCDMA_BAND 0,BAND1                    // WCDMA Band
WCDMA_MEAS_OFF 0                      // All Measurement Items Off
WCDMA_PWR_SET 0,ON,20                 // Power Measurement On with Average 20
WCDMA_SEM_SET 0,ON,25                 // SEM Measurement On with Average 25
WCDMA_MOD_SET 0,ON,25                 // Modulation Analysis On with Average 25
/* Condition #1 */
WCDMA_MEAS_OFF 1                      // All Measurement Items Off
WCDMA_PWR_SET 1,ON,10                 // Power Measurement On with Average 10
WCDMA_MOD_SET 1,ON,10                 // Modulation Analysis On with Average 10
/* Condition #2 */
WCDMA_MEAS_OFF 2                      // All Measurement Items Off
WCDMA_PWR_SET 2,ON,20                 // Power Measurement On with Average 20
*OPC?
/*** ----- Sequence Table ----- ***/
SEQTBL 0                                      // Active Sequence Table Number
/* Segment #0 */
SEQTRX 0,1950.0,24.0,2140.0,-80.0,NC  // TRX Frequency and Level
SEQTRG 0,PWR,RISE,-20.0,0.0           // Trigger
SEQMEAS 0,WCDMA,30,0                  // WCDMA Mode for 30 slots with Condition #0
/* Segment #1 */
SEQTRX 1,1950.0,-20.0,2140.0,-80.0,NC // TRX Frequency and Level
SEQTRG 1,FREERUN,RISE,-20.0,0         // Trigger
SEQMEAS 1,WCDMA,15,1                  // WCDMA Mode for 15 slots with Condition #1
/* Segment #2 */
SEQTRX 2,1950.0,-56.0,2140.0,-80.0,NC // TRX Frequency and Level
SEQTRG 2,FREERUN,RISE,-20.0,0         // Trigger
SEQMEAS 2,WCDMA,30,2                  // WCDMA Mode for 30 slots with Condition #2
*OPC?
/*** ----- Starting of Sequence Measurement ----- ***/
SEQTBL 0                                      // Active Sequence Table Number
SEQCTRL 0,2                           // Execution : Start Segment #0, Stop Segment #2
SNGLS                                 // Initiation of Sequence Measurement
*OPC?                                 // Confirmation of trigger ready
/* UE will start sequence here */
/*** ----- Result ----- ***/
/* Segment #0 */
/* Waiting for Completion */
```

```
do{
        status[0] = response( “SEQSEGSTAT? 0” )
}while( status[0]==9 )                          // 9 means the segment is not completed
if( status[0]==0 ){                     // 0 means the segment has no error
        WCDMA_TXPWR? 0,AVG              // TX Power Result
        WCDMA_SEM? 0                    // SEM Judgment
        WCDMA_EVM? 0,AVG                // EVM Result
}
/* Segment #1 */
/* Waiting for Completion */
do{
        status[1] = response( “SEQSEGSTAT? 1” )
}while( status[1]==9 )                  // 9 means the segment is not completed
if( status[1]==0 ){                     // 0 means the segment has no error
        WCDMA_FILTPWR? 1,AVG            // Filtered Power Result
        WCDMA_EVM? 1,AVG                // EVM Result
}
/* Segment #2 */
/* Waiting for Completion */
do{
        status[2] = response( “SEQSEGSTAT? 2” )
}while( status[2]==9 )                  // 9 means the segment is not completed
if( status[2]==0 ){                     // 0 means the segment has no error
        WCDMA_FILTPWR? 2,AVG            // Filtered Power Result
}
```

1.5. MX882020C-002/MX882120C-002 GSM Measurement Software

Example of remote command in the GSM measurement mode are as follows.

1.5.1. Control Command Example

Table 1.5.1-2 shows an example of the remote commands for executing the measurement sequence under the measurement conditions listed in Table 1.5.1-1.

Table 1.5.1-1 Measurement Conditions

Parameter	Specifications	
Measurement condition 1	Frequency	GSM900, DL 935.2 MHz, UL 890.2 MHz
	Level	DL –80 dBm, UL 33 dBm
	Number of steps	26
	Measurement items and number of averaging	TX Power (Number of averaging: 10) ORFS (Number of averaging: 20) Frequency error and modulation analysis (Number of averaging:10)
Measurement condition 2	Frequency	DCS1800, DL 1805.2 MHz, UL 1710.2 MHz
	Level	DL –80 dBm, UL 30 dBm
	Number of steps	52
	Measurement items and number of averaging	TX Power (Number of averaging: 10) ORFS (Number of averaging: 40) Frequency error and modulation analysis (Number of averaging:10)

Table 1.5.1-2 Example of Remote Commands

```
/* ----- Common Parameter ----- */
PACKAGE PAC1                          // DL ARB waveform package
DLPAT PAT8                            // DL ARB waveform pattern
MOD ON                                        // Modulation On
*OPC?
/* ----- GSM System Parameter ----- */
GSM_TSC TSC2
GSM_RBWFLT 100KHZ
*OPC?
/*** ----- GSM Measurement Condition ----- ***/
/* Condition #0 */
GSM_RF 0, GSM900, 5, GMSK             // GSM Band,  PCL,  Modulation
GSM_ASLOTS 0, 1                       // Number of active slots 1
GSM_MEAS_OFF 0                        // All Measurement Items Off
GSM_PWR_SET 0, ON, 10                 // Power Measurement On with Average 10
GSM_ORFS_SET 0, ON, 20                // ORFS Measurement On with Average 20
GSM_MOD_SET 0, ON, 10                 // Modulation Analysis On with Average 10
/* Condition #1 */
GSM_RF 1,DCS1800,0,GMSK               // GSM Band,  PCL,  Modulation
GSM_ASLOTS 1, 1                       // Number of active slots 1
GSM_MEAS_OFF 1                        // All Measurement Items Off
GSM_PWR_SET 1, ON, 10                 // Power Measurement On with Average 10
GSM_ORFS_SET 1, ON, 40                // ORFS Measurement On with Average 40
GSM_MOD_SET 1, ON, 10                 // Modulation Analysis On with Average 10
```

```
*OPC?
/*** ----- Sequence Table ----- ***/
SEQTBL 0                                        // Active Sequence Table Number
/* Segment #0 */
SEQTRX 0, 890.2, 33.0, 935.2, -80.0, NC         // TRX Frequency and Level
SEQTRG 0, PWR, RISE, -20.0, 0.0                 // Trigger
SEQMEAS 0, GSM, 26, 0                           // GSM Mode for 26 frames with Condition #0
/* Segment #1 */
SEQTRX 1, 1710.2, 30.0, 1805.2, -80.0, NC       // TRX Frequency and Level
SEQTRG 1, FREERUN, RISE, -20.0, 0               // Trigger
SEQMEAS 1, GSM, 52, 1                           // GSM Mode for 52 frames with Condition #1
*OPC?
/*** ----- Starting Sequence Measurement ----- ***/
SEQTBL 0                                        // Active Sequence Table Number
SEQCTRL 0, 1                                    // Execution : Start Segment #0,   Stop Segment #1
SNGLS                                           // Initiation of Sequence Measurement
*OPC?                                           // Confirmation of trigger ready
/* UE will start sequence here */
/*** ----- Result ----- ***/
/* Segment #0 */
/* Waiting for Completion */
do{
        status[0] = response( "SEQSEGSTAT? 0" )
}while( status[0]==9 )                          // 9 means the segment is not completed
if( status[0]==0 ){                             // 0 means the segment has no error
        GSM_TXPWR? 0, AVG, 0                    // TX Power Result,   slot 0
        GSM_ORFSMD_JUDGE? 0, 0                  // ORFS due to Modulation Judgment,   slot 0
        GSM_ORFSSW_JUDGE? 0, 0                  // ORFS due to Switching Judgment,   slot 0
        GSM_CFERR_WORST? 0, 0                   // Carrier Frequency Error Result,   slot 0
        GSM_PHASEERR? 0, MAX, 0                 // RMS Phase Error Result,   slot 0
        GSM_PPHASEERR_ABS? 0, MAX, 0            // Peak Phase Error Result,   slot 0
}
/* Segment #1 */
/* Waiting for Completion */
do{
        status[1] = response( "SEQSEGSTAT? 1" )
}while( status[1]==9 )                          // 9 means the segment is not completed
if( status[1]==0 ){                             // 0 means the segment has no error
        GSM_TXPWR? 1, AVG, 0                    // TX Power Result,   slot 0
        GSM_ORFSMD_JUDGE? 1, 0                  // ORFS due to Modulation Judgment,   slot 0
        GSM_ORFSSW_JUDGE? 1, 0                  // ORFS due to Switching Judgment,   slot 0
        GSM_CFERR_WORST? 1, 0                   // Carrier Frequency Error Result,   slot 0
        GSM_PHASEERR? 1, MAX, 0                 // RMS Phase Error Result,   slot 0
        GSM_PPHASEERR_ABS? 1, MAX, 0            // Peak Phase Error Result,   slot 0
}
```

1.6. MX882020C-003/MX882120C-003 CDMA2000 Measurement Software (CDMA2000 1x)

Example of remote command in the CDMA2000 1x measurement mode are as follows.

1.6.1. Control Command Example

Table 1.6.1-2 shows an example of the remote commands for executing the measurement sequence under the measurement conditions listed in Table 1.6.1-1.

Table 1.6.1-1 Measurement Conditions

Parameter	Specifications	
Measurement condition 1	Frequency	Band Class 1, FL 1931.25 MHz, RL 1851.25 MHz
	Level	FL –80 dBm, RL 23 dBm
	Number of steps	32
	Radio configuration	RC1
	Measurement items and number of averaging	Filtered Power (Number of averaging: 10) Spurious Emission (Number of averaging: 20) Frequency error and modulation analysis (Number of averaging: 10)
Measurement condition 2	Frequency	Band Class 1, FL 1932.25 MHz, RL 1852.25 MHz
	Level	FL –80 dBm, RL 23 dBm
	Number of steps	48
	Radio configuration	RC1
	Measurement items and number of averaging	Filtered Power (Number of averaging: 10) Spurious Emission (Number of averaging: 40) Frequency error and modulation analysis (Number of averaging: 10)

Table 1.6.1-2 Example of Remote Commands

```
/* ----- Common Parameter ----- */
PACKAGE PAC1                          // DL ARB waveform package
DLPAT PAT16                           // DL ARB waveform pattern
MOD ON                                        // Modulation On
*OPC?
/* ----- CDMA2000 1x System Parameter ----- */
CDMA2K_LSCODESEARCH OFF
*OPC?
/*** ----- CDMA2000 1x Measurement Condition ----- ***/
/* Condition #0 */
CDMA2K_BAND 0,1                       // CDMA2000 1x Band Class 1
CDMA2K_RC 0,RC1                       // CDMA2000 1x RL RC1
CDMA2K_MEAS_OFF 0                     // All Measurement Items Off
CDMA2K_PWR_SET 0,ON,10                // Power Measurement On with Average 10
CDMA2K_SPR_SET 0,ON,20                // Spurious Emission Measurement On with Average 20
CDMA2K_MOD_SET 0,ON,10                // Modulation Analysis On with Average 10
/* Condition #1 */
```

```
CDMA2K_BAND 1,1                         // CDMA2000 1x Band Class 1
CDMA2K_RC 1,RC1                         // CDMA2000 1x RL RC1
CDMA2K_MEAS_OFF 1                       // All Measurement Items Off
CDMA2K_PWR_SET 1,ON,10                  // Power Measurement On with Average 10
CDMA2K_SPR_SET 1,ON,40                  // Spurious Emission Measurement On with Average 40
CDMA2K_MOD_SET 1,ON,10                  // Modulation Analysis On with Average 10
*OPC?
/*** ----- Sequence Table ----- ***/
SEQTBL 0                                        // Active Sequence Table Number
/* Segment #0 */
SEQTRX 0,1851.25,23.0,1931.25,-80.0,NC  // TRX Frequency and Level
SEQTRG 0,PWR,RISE,-20.0,0.0             // Trigger
SEQMEAS 0,CDMA2K,32,0                   // CDMA2000 1x Mode for 32 slots with Condition #0
/* Segment #1 */
SEQTRX 1,1852.25,23.0,1932.25,-80.0,NC  // TRX Frequency and Level
SEQTRG 1,FREERUN,RISE,-20.0,0                   // Trigger
SEQMEAS 1,CDMA2K,48,1                   // CDMA2000 1x Mode for 48 slots with Condition #1
*OPC?
/*** ----- Starting Sequence Measurement ----- ***/
SEQTBL 0                                        // Active Sequence Table Number
SEQCTRL 0,1                             // Execution: Start Segment #0, Stop Segment #1
SNGLS                                   // Initiation of Sequence Measurement
*OPC?                                   // Confirmation of trigger ready
/* UE will start sequence here */
/*** ----- Result ----- ***/
/* Segment #0 */
/* Waiting for Completion */
do{
        status[0] = response( “SEQSEGSTAT? 0” )
}while( status[0]==9 )                          // 9 means the segment is not completed
if( status[0]==0 ){                     // 0 means the segment has no error
        CDMA2K_FILTPWR? 0,AVG           // Filtered Power Result
        CDMA2K_SEM      ? 0             // Spurious Emission Judgment
        CDMA2K_CFERR_WORST? 0           // Carrier Frequency Error Result
        CDMA2K_RHO? 0,AVG               // Waveform Quality Result
        CDMA2K_EVM? 0,AVG               // EVM Result
        CDMA2K_ORGNOFS? 0,AVG           // Carrier Leak Result
}
/* Segment #1 */
/* Waiting for Completion */
do{
        status[1] = response( “SEQSEGSTAT? 1” )
}while( status[1]==9 )                  // 9 means the segment is not completed
if( status[1]==0 ){                     // 0 means the segment has no error
        CDMA2K_FILTPWR? 1,AVG           // Filtered Power Result
        CDMA2K_SEM      ? 1             // Spurious Emission Judgment
        CDMA2K_CFERR_WORST? 1           // Carrier Frequency Error Result
        CDMA2K_RHO? 1,AVG               // Waveform Quality Result
        CDMA2K_EVM? 1,AVG               // EVM Result
        CDMA2K_ORGNOFS? 1,AVG           // Carrier Leak Result
}
```

1.7. MX882020C-003/MX882120C-003 CDMA2000 Measurement Software (1xEV-DO)

Example of remote commands in the CDMA2000 1xEV-DO measurement mode are as follows.

1.7.1. Control Command Example

Table 1.7.1-2 shows an example of the remote commands for executing the measurement sequence under the measurement conditions listed in Table 1.7.1-1.

Table 1.7.1-1 Measurement Conditions

Parameter	Specifications	
Measurement condition 1	Frequency	Band Class 1，FL 1931.25 MHz，RL 1851.25 MHz
	Level	FL –80 dBm，RL 23 dBm
	Number of steps	32
	Protocol revision	Rev. 0
	Measurement items and number of averaging	Filtered Power (Number of averaging: 10) Spurious Emission (Number of averaging: 20) Frequency error and modulation analysis (Number of averaging: 10)
Measurement condition 2	Frequency	Band Class 1，FL 1932.25 MHz，RL 1852.25MHz
	Level	FL –80 dBm，RL 23 dBm
	Number of steps	48
	Protocol revision	Rev. 0
	Measurement items and number of averaging	Filtered Power (Number of averaging: 10) Spurious Emission (Number of averaging: 40) Frequency error and modulation analysis (Number of averaging: 10)

Table 1.7.1-2 Example of Remote Commands

```
/* ----- Common Parameter ----- */
PACKAGE PAC1                          // DL ARB waveform package
DLPAT PAT16                           // DL ARB waveform pattern
MOD ON                                        // Modulation On
*OPC?
/* ----- CDMA2000 1xEV-DO System Parameter ----- */
EVDO_PREV REV0                        // 1xEV-DO Protocol Revision Rev. 0
EVDO_LSCODESEARCH OFF
*OPC?
/*** ----- CDMA2000 1xEV-DO Measurement Condition ----- ***/
/* Condition #0 */
EVDO_BAND 0,1                         // CDMA2000 1xEV-DO Band Class 1
EVDO_MEAS_OFF 0                       // All Measurement Items Off
EVDO_PWR_SET 0,ON,10                  // Power Measurement On with Average 10
EVDO_SPR_SET 0,ON,20                  // Spurious Emission Measurement On with Average 20
```

```
EVDO_MOD_SET 0,ON,10                    // Modulation Analysis On with Average 10
/* Condition #1 */
EVDO_BAND 1,1                           // CDMA2000 1xEV-DO Band Class 1
EVDO_MEAS_OFF 1                         // All Measurement Items Off
EVDO_PWR_SET 1,ON,10                    // Power Measurement On with Average 10
EVDO_SPR_SET 1,ON,40                    // Spurious Emission Measurement On with Average 40
EVDO_MOD_SET 1,ON,10                    // Modulation Analysis On with Average 10
*OPC?
/*** ----- Sequence Table ----- ***/
SEQTBL 0                                        // Active Sequence Table Number
/* Segment #0 */
SEQTRX 0,1851.25,23.0,1931.25,-80.0,NC  // TRX Frequency and Level
SEQTRG 0,PWR,RISE,-20.0,0.0             // Trigger
SEQMEAS 0,EVDO,32,0                     // CDMA2000 1xEV-DO Mode for 32 slots with Condition #0
/* Segment #1 */
SEQTRX 1,1852.25,23.0,1932.25,-80.0,NC  // TRX Frequency and Level
SEQTRG 1,FREERUN,RISE,-20.0,0           // Trigger
SEQMEAS 1,EVDO,48,1                     // CDMA2000 1xEV-DO Mode for 48 slots with Condition #1
*OPC?
/*** ----- Starting Sequence Measurement ----- ***/
SEQTBL 0                                        // Active Sequence Table Number
SEQCTRL 0,1                             // Execution : Start Segment #0, Stop Segment #1
SNGLS                                   // Initiation of Sequence Measurement
*OPC?                                   // Confirmation of trigger ready
/* UE will start sequence here */
/*** ----- Result ----- ***/
/* Segment #0 */
/* Waiting for Completion */
do{
        status[0] = response( “SEQSEGSTAT? 0” )
}while( status[0]==9 )                          // 9 means the segment is not completed
if( status[0]==0 ){                     // 0 means the segment has no error
        EVDO_FILTPWR? 0,AVG                     // Filtered Power Result
        EVDO_SEM ? 0                    // Spurious Emission Judgment
        EVDO_CFERR_WORST? 0             // Carrier Frequency Error Result
        EVDO_RHO? 0,AVG                 // Waveform Quality Result
        EVDO_EVM? 0,AVG                 // EVM Result
        EVDO_ORGNOFS? 0,AVG             // Carrier Leak Result
}
/* Segment #1 */
/* Waiting for Completion */
do{
        status[1] = response( “SEQSEGSTAT? 1” )
}while( status[1]==9 )                  // 9 means the segment is not completed
if( status[1]==0 ){                     // 0 means the segment has no error
        EVDO_FILTPWR? 1,AVG                     // Filtered Power Result
        EVDO_SEM ? 1                    // Spurious Emission Judgment
        EVDO_CFERR_WORST? 1             // Carrier Frequency Error Result
        EVDO_RHO? 1,AVG                 // Waveform Quality Result
        EVDO_EVM? 1,AVG                 // EVM Result
        EVDO_ORGNOFS? 1,AVG             // Carrier Leak Result
}
```

1.8. MX882020C-004/MX882120C-004 LTE Measurement Software

Examples of remote commands in the LTE measurement mode are as follows.

1.8.1. Control Command Example

Table 1.8.1-2 shows an example of the remote commands for executing the measurement sequence under the measurement conditions listed in Table 1.8.1-1.

Table 1.8.1-1 Measurement Conditions

Parameter	Specifications	
Measurement condition 1	Channel bandwidth	10 MHz Full RB
	Modulation formula	QPSK
	Frequency	DL 2140.0 MHz，UL 1950.0 MHz
	Level	DL –80 dBm，UL 23 dBm
	Number of steps	30
	Measurement items and number of averaging	Channel Power (Number of averaging:10) SEM (Number of averaging:20) ACLR (Number of averaging:10) Frequency error and modulation analysis (Number of averaging: 10)
Measurement condition 2	Channel bandwidth	10 MHz Full RB
	Modulation formula	QPSK
	Frequency	DL 2150.0 MHz，UL 1960.0 MHz
	Level	DL –80 dBm，UL 23 dBm
	Number of steps	60
	Measurement items and number of averaging	Channel Power (Number of averaging:10) SEM (Number of averaging:40) ACLR (Number of averaging:20) Frequency error and modulation analysis (Number of averaging: 10)

Table 1.8.1-2 Example of Remote Commands

```
/* ----- Common Parameter ----- */
PACKAGE PAC2                        // DL ARB waveform package
DLPAT PAT0                          // DL ARB waveform pattern
MOD ON                                      // Modulation On
*OPC?
/* ----- LTE System Parameter ----- */
LTE_LONGSEARCH OFF
*OPC?
/*** ----- LTE Measurement Condition ----- ***/
/* Condition #0 */
LTE_BW_RB 0,10MHZ,50,0              // 10 MHz BW, Full RB
LTE_ULRMC_MOD 0,QPSK                // QPSK Modulation
LTE_MEAS_OFF 0                      // All Measurement Items Off
LTE_PWR_SET 0,ON,10                 // Power Measurement On with Average 10
LTE_SEM_SET 0,ON,20                 // SEM Measurement On with Average 20
LTE_ACLR_SET 0,ON,10                // ACLR Measurement On with Average 10
LTE_MOD_SET 0,ON,10                 // Modulation Analysis On with Average 10
/* Condition #1 */
LTE_BW_RB 1,10MHZ,50,0              // 10 MHz BW, Full RB
LTE_ULRMC_MOD 1,QPSK                // QPSK Modulation
LTE_MEAS_OFF 1                      // All Measurement Items Off
LTE_PWR_SET 1,ON,10                 // Power Measurement On with Average 10
LTE_SEM_SET 1,ON,40                 // SEM Measurement On with Average 40
LTE_ACLR_SET 1,ON,20                // ACLR Measurement On with Average 20
LTE_MOD_SET 1,ON,10                 // Modulation Analysis On with Average 10
*OPC?
/*** ----- Sequence Table ----- ***/
SEQTBL 0                                    // Active Sequence Table Number
/* Segment #0 */
SEQTRX 0,1950.0,23.0,2140.0,-80.0,NC        // TRX Frequency and Level
SEQTRG 0,PWR,RISE,-20.0,0.0                 // Trigger
SEQMEAS 0,LTE,30,0                          // LTE Mode for 30 subframes with Condition #0
/* Segment #1 */
SEQTRX 1,1960.0,23.0,2150.0,-80.0,NC        // TRX Frequency and Level
SEQTRG 1,FREERUN,RISE,-20.0,0               // Trigger
SEQMEAS 1,LTE,60,1                          // LTE Mode for 60 subframes with Condition #1
*OPC?
/*** ----- Starting Sequence Measurement ----- ***/
SEQTBL 0                                    // Active Sequence Table Number
SEQCTRL 0,1                         // Execution : Start Segment #0, Stop Segment #1
SNGLS                               // Initiation of Sequence Measurement
*OPC?                               // Confirmation of trigger ready
/* UE will start sequence here */
/*** ----- Result ----- ***/
/* Segment #0 */
/* Waiting for Completion */
do{
        status[0] = response( "SEQSEGSTAT? 0" )
}while( status[0]==9 )                      // 9 means the segment is not completed
if( status[0]==0 ){                 // 0 means the segment has no error
        LTE_CHPWR? 0,AVG            // Channel Power Result
        LTE_SEM? 0                          // SEM Judgment
        LTE_ACLR? 0,AVG             // ACLR Result
```

```
        LTE_CFERR_WORST? 0          // Carrier Frequency Error Result
        LTE_EVM? 0,AVG              // EVM Result
        LTE_PEVM? 0,AVG             // Peak EVM Result
        LTE_RSEVM? 0,AVG            // Reference Signal EVM Result
}
/* Segment #1 */
/* Waiting for Completion */
do{
        status[1] = response( “SEQSEGSTAT? 1” )
}while( status[1]==9 )                          // 9 means the segment is not completed
if( status[1]==0 ){                 // 0 means the segment has no error
        LTE_CHPWR? 1,AVG            // Channel Power Result
        LTE_SEM? 1                          // SEM Judgment
        LTE_ACLR? 1,AVG             // ACLR Result
        LTE_CFERR_WORST? 1          // Carrier Frequency Error Result
        LTE_EVM? 1,AVG              // EVM Result
        LTE_PEVM? 1,AVG             // Peak EVM Result
        LTE_RSEVM? 1,AVG            // Reference Signal EVM Result
}
```

1.9. MX8820202C-005/MX8821202C-005 TD-SCDMA Measurement Software

Examples of remote commands in the TD-SCDMA measurement mode are as follows.

1.9.1. Control Command Example

Table 1.9.1-2 shows an example of the remote commands for executing the measurement sequence under the measurement conditions listed in Table 1.9.1-1.

Table 1.9.1-1 Measurement Conditions

Parameter	Specifications	
Frequency	DL 2140.0 MHz, UL 2010.6 MHz	
Measurement condition 1	Level	DL –80 dBm, UL 24 dBm
	Number of steps	30
	Measurement items and number of averaging	TX Power (Number of averaging: 20) SEM (Number of averaging: 25) Frequency error and EVM (Number of averaging: 25)
Measurement condition 2	Level	DL –80 dBm, UL –20 dBm
	Number of steps	15
	Measurement items and number of averaging	Filtered Power (Number of averaging: 10) EVM (Number of averaging: 10)

Table 1.9.1-2 Example of Remote Commands

```
/* ----- Common Parameter ----- */
PACKAGE PAC1                        // DL ARB waveform package
DLPAT PAT27                         // DL ARB waveform pattern
MOD ON                                      // Modulation On
*OPC?
/*** ----- TDSCDMA Measurement Condition ----- ***/
/* Condition #0 */
TDSCDMA_MEAS_OFF 0                  // All Measurement Items Off
TDSCDMA_PWR_SET 0,ON,20             // Power Measurement On with Average 20
TDSCDMA_SEM_SET 0,ON,25             // SEM Measurement On with Average 25
TDSCDMA_MOD_SET 0,ON,25             // Modulation Analysis On with Average 25
/* Condition #1 */
TDSCDMA_MEAS_OFF 1                  // All Measurement Items Off
TDSCDMA_PWR_SET 1,ON,10             // Power Measurement On with Average 10
TDSCDMA_MOD_SET 1,ON,10             // Modulation Analysis On with Average 10
*OPC?
/*** ----- Sequence Table ----- ***/
SEQTBL 0                                    // Active Sequence Table Number
/* Segment #0 */
SEQTRX 0,2010.6,24.0,2140.0,-80.0,NC    // TRX Frequency and Level
SEQTRG 0,PWR,RISE,-20.0,0.0             // Trigger
SEQMEAS 0,TDSCDMA,30,0                  // TDSCDMA Mode for 30 subframes with Condition #0
/* Segment #1 */
SEQTRX 1,2010.6,-20.0,2140.0,-80.0,NC   // TRX Frequency and Level
```

```
SEQTRG 1,FREERUN,RISE,-20.0,0                    // Trigger
SEQMEAS 1,TDSCDMA,15,1                  // TDSCDMA Mode for 15 subframes with Condition #1
*OPC?
/*** ----- Starting of Sequence Measurement ----- ***/
SEQTBL 0                                         // Active Sequence Table Number
SEQCTRL 0,1                             // Execution : Start Segment #0, Stop Segment #1
SNGLS                                   // Initiation of Sequence Measurement
*OPC?                                   // Confirmation of trigger ready
/* UE will start sequence here */
/*** ----- Result ----- ***/
/* Segment #0 */
/* Waiting for Completion */
do{
        status[0] = response( “SEQSEGSTAT? 0” )
}while( status[0]==9 )                           // 9 means the segment is not completed
if( status[0]==0 ){                     // 0 means the segment has no error
        TDSCDMA_TXPWR? 0,AVG            // TX Power Result
        TDSCDMA_SEM? 0                  // SEM Judgment
        TDSCDMA_EVM? 0,AVG                       // EVM Result
}
/* Segment #1 */
/* Waiting for Completion */
do{
        status[1] = response( “SEQSEGSTAT? 1” )
}while( status[1]==9 )                  // 9 means the segment is not completed
if( status[1]==0 ){                     // 0 means the segment has no error
        TDSCDMA_FILTPWR? 1,AVG          // Filtered Power Result
        TDSCDMA_EVM? 1,AVG                       // EVM Result
}
```

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Specifications are subject to change without notice.

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