

Tune procedure

1, Program firmware

2, The frequency channel will be identified by firmware and hardware ID

3, Test and tune K338A PCB:

TX power/frequency/modulation/RX SINAD/ RX audio level /surround/vox function, all by vee test system and sequence are below:

K338A (P1280-extra PMR) F3 test and align sequence

Read protocol descriptors, firmware details etc

P1280.DeviceReadDescriptors("Read PC communication descriptors")

P1280.DeviceReadFirmwareBuildDate("Read firmware build date")

P1280.DeviceReadFirmwareVersion("Read firmware version")

P1280.DeviceVerifyFirmwareVersion("Verify firmware version", "0.9.12")

Verify hardware ID

P1280.DeviceVerifyHardwareAndSoftwareID("Verify hardware ID", 0x02, 0x00)

Check error codes except parameter errors

#P1280.DeviceCheckErrorCodes("Check error codes", 0xFFFFF7BF)

P1280.DeviceCheckErrorCodes("Check error codes", 0xFFFFF7BF)

Restore data

P1280.DeviceRestoreDefaultsALL("Restore ALL data, including tuning and serial number")

Check all error codes

P1280.DeviceCheckErrorCodes("Check error codes", 0xFFFFFFFF)

Set and read serial number

P1280.DeviceWriteSerialNumber("Write serial number")

P1280.DeviceReadSerialNumber("Read serial number")

Set menu to default testing state

P1280.DeviceSetMenuState("Set menu to default test state", 3, 3, 7, 0, 5, 0)

Verify standby current consumption

#P1280.TestStandbyCurrent("Standby current consumption", 40, 80)

Ext input to speaker output

P1280.TestEXTAFToSpeakerLeft ("Ext AF to speaker left", 96, 99, 90, 1000, 0.1)

P1280.TestEXTAFToSpeakerRight ("Ext AF to speaker right", 96, 99, 90, 1000, 0.1)

P1280.TestEXTAFToSpeakerbalance("Ext AF to speaker balance", -1.5, 1.5)

Surround mics to speaker output

P1280.TestSSToSpeakerLeft ("Surround mic to speaker left", 96, 99, 90, 1000, 1)

P1280.TestSSToSpeakerRight("Surround mic to speaker right", 96, 99, 90, 1000, 1)

P1280.TestSSToSpeakerbalance("Surround mic to speaker balance", -1.5, 1.5)

Set menu to default testing state

P1280.DeviceSetMenuState("Set menu to default test state", 3, 3, 7, 0, 0, 0)

RX Sinad

P1280.TestRXSinad("Sinad", 12, 40, 462.7125M, -100, 1500)

TX frequency, deviation and power

P1280.TestTXFrequencyRelative("TX center frequency", -500, 500, 462.7125M)

#P1280.TestTXPowerLow ("TX output power (low)", 0mW, 10mW, 462.7125M)

P1280.TestTXPowerHigh("TX output power (high)", 170mW, 280mW, 462.7125M)

P1280.TestTXDeviation60Proc("TX 60 percent deviation", 1400, 1650, 462.7125M, 74.0)

P1280.TestTXDeviationMax("TX max deviation", 1800, 2500, 462.7125M, 94.0)

Test TX sidetone level

P1280.TestTXSidetoneLevelLeft ("TX sidetone level left" , 96, 101, 74)

P1280.TestTXSidetoneLevelRight("TX sidetone level Right", 96, 101, 74)

Set squelch off

P1280.DeviceSetMenuState("Set squelch off", 0, 3, 7, 0, 0, 0)

RX Sinad

P1280.TestRXSinad("Sinad", 12, 40, 462.7125M, -116.5, 1500)

RX audio level

P1280.TestRXLevelLeft ("RX audio level left" , 110.0, 112.0, 462.7125M, -100, 1500)

P1280.TestRXLevelRight("RX audio level right", 110.0, 112.0, 462.7125M, -100, 1500)

Set menu to default testing state

P1280.DeviceSetMenuState("Set menu to default test state", 3, 3, 7, 0, 5, 0)