

1 TERMINAL FUNCTIONS

| Pin No. | Signal Name | Input/ Output | Signal Type | Specification | Min. | Typ. | Max. | Unit |
|---------|-------------|---------------|-------------------------------------|--|------|------|------|------|
| 25 | OPT6 | Input/ Output | Digital/ CMOS Output/ CMOS Input | VIH | 2.7 | - | 3.5 | V |
| | | | | VIL | -0.3 | - | 0.7 | V |
| | | | | VOH (I _o = -2 mA) | 2.8 | - | 3.4 | V |
| | | | | VOL (I _o = 2 mA) | - | - | 0.7 | V |
| 26 | POW | - | Power | Output Voltage (I _o = 100 mA) | 7.6 | 8.0 | 8.4 | V |
| | | | | Output Current | - | - | 100 | mA |

*1 Using KPG-111D, COR, TOR or LOK (Continuous) can be assigned. (Refer to FPRG 6.27.1 Optional Board Tab.)

1.3 D-sub 25-pin Connector

The 25-pin D-sub connector is available on the rear panel of the transceiver and external devices, such as a Mobile Data Terminal, can be connected to this connector.

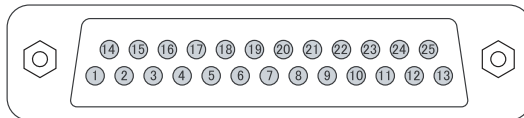


Figure 1-3 D-sub 25-pin Connector

Table 1-3 Signal Assignments for D-sub 25-pin Connector

| Pin No. | Signal Name | Input/ Output | Signal Type | Specification | Min. | Typ. | Max. | Unit |
|---------|-------------|---------------|-------------|--|---------|---------|-------|----------|
| 1 | NC | - | - | - | - | - | - | - |
| 2 | RXD1 | Input | Digital | Input Voltage Range | -30 | - | 30 | V |
| | | | | Threshold Low | 0.5 | 1.3 | - | V |
| | | | | Threshold High | - | 1.75 | 2.6 | V |
| | | | | Baud Rate | - | - | 19200 | bps |
| 3 | TXD1 | Output | Digital | Voltage Swing (3k Ω Load) | \pm 5 | \pm 9 | - | V |
| | | | | Baud Rate | - | - | 19200 | bps |
| | | | | CL | - | 100 | - | pF |
| | | | | CL | - | 100 | - | pF |
| 4 | AUXIO9 | Input/ Output | Digital | VIH | 4.0 | - | 5.2 | V |
| | | | | VIL | -0.5 | - | 1.0 | V |
| | | | | VOH (I _o = -1.5 mA) | 4.0 | - | 5.2 | V |
| | | | | VOL (I _o = 1.5 mA) | - | - | 1.1 | V |
| 5 | DI | Input | Analog | Input Voltage Range (STD Deviation) | - | 0.5 | - | Vp-p |
| | | | | Frequency Response (STD Deviation) 20 Hz - 9600 Hz (TBD) | -3 | - | 3 | dB |
| 6 | MI2 | Input | Analog | Audio Level (STD Deviation) | - | 5.0 | - | mVrms |
| | | | | Allowable Frequency | 300 | - | 3000 | Hz |
| | | | | Input Impedance | - | 600 | - | Ω |
| 7 | GND | - | GND | - | - | - | - | |

| Pin No. | Signal Name | Input/ Output | Signal Type | Specification | Min. | Typ. | Max. | Unit |
|---------|---------------------|---------------|-------------|--|--|------|------|------|
| 8 | AUXIO8 | Input/ Output | Digital | VIH | 4.0 | - | 5.2 | V |
| | | | | VIL | -0.5 | - | 1.0 | V |
| | | | | VOH (Io = -1.5 mA) | 4.0 | - | 5.2 | V |
| | | | | VOL (Io = 1.5 mA) | - | - | 1.1 | V |
| 9 | TXD2 | Output | Digital | VOH (Io = -1.5 mA) | 3.7 | - | 5.2 | V |
| | | | | VOL (Io = 1.5 mA) | - | - | 1.1 | V |
| | | | | CL | - | 100 | - | pF |
| 10 | RXD2 | Input | Digital | VIH | 2.8 | - | 5.2 | V |
| | | | | VIL | - | - | 0.65 | V |
| | | | | CL | - | 100 | - | pF |
| 11 | GND | - | GND | - | - | - | - | |
| 12 | AUXIO7/ BER_DATA | Input/ Output | Digital | VIH | 4.0 | - | 5.2 | V |
| | | | | VIL | -0.5 | - | 1.0 | V |
| | | | | VOH (Io = -1.5 mA) | 3.7 | - | 5.2 | V |
| | | | | VOL (Io = 1.5 mA) | - | - | 1.1 | V |
| 13 | AUXIO6/ BER_CLK | Input/ Output | Digital | VIH | 4.0 | - | 5.2 | V |
| | | | | VIL | -0.5 | - | 1.0 | V |
| | | | | VOH (Io = -1.5 mA) | 3.7 | - | 5.2 | V |
| | | | | VOL (Io = 1.5 mA) | - | - | 1.1 | V |
| 14 | SB | - | Power | Voltage | This parameter depends on battery voltage. | | | |
| | | | | Supply Current | - | - | 2.0 | A |
| 15 | AUXO2 | Output | Digital | The type of this port is open collector. | | | | |
| | | | | VOL | - | - | 0.4 | V |
| | | | | IOL | - | - | -500 | mA |
| 16 | AUXO1 | Output | Digital | The type of this port is open collector. | | | | |
| | | | | VOL | - | - | 0.4 | V |
| | | | | IOL | - | - | -500 | mA |
| 17 | AFO | Output | Analog | Output Level | - | 0.7 | - | Vp-p |
| | | | | Coupling Capacitor | - | 0.1 | - | μF |
| | | | | Allowable Load | 100 | - | - | kΩ |
| | | | | Allowable Frequency | 300 | - | 3000 | Hz |
| 18 | GND | - | GND | - | - | - | - | |
| 19 | DEO | Output | Analog | Output Level | - | 0.28 | - | Vp-p |
| | | | | Coupling Capacitor | - | 4.7 | - | μF |
| | | | | Allowable Load | 47 | - | - | kΩ |
| | | | | Frequency Response (STD Deviation) | | | | |
| | | | | Wide: 20 Hz - 4800 Hz | -6 | - | 1 | dB |
| | | | | Wide: 4800 Hz -7200Hz | -24 | - | 1 | dB |
| | | | | Narrow: 20 Hz - 4800 Hz | -15 | - | 1 | dB |
| 20 | AUXIO5 | Input/ Output | Digital | VIH | 4.0 | - | 5.2 | V |
| | | | | VIL | -0.5 | - | 1.0 | V |
| | | | | VOH (Io = -1.5 mA) | 4.0 | - | 5.2 | V |
| | | | | VOL (Io = 1.5 mA) | - | - | 1.1 | V |

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| Pin No. | Signal Name | Input/ Output | Signal Type | Specification | Min. | Typ. | Max. | Unit |
|---------|-------------|---------------|-------------|----------------------------------|------|------|------|------|
| 21 | AUXIO4 | Input/ Output | Digital | VIH | 4.0 | - | 5.2 | V |
| | | | | VIL | -0.5 | - | 1.0 | V |
| | | | | VOH (Io = -1.5 mA) | 4.0 | - | 5.2 | V |
| | | | | VOL (Io = 1.5 mA) | - | - | 1.1 | V |
| 22 | AUXIO3 | Input/ Output | Digital | VIH | 4.0 | - | 5.2 | V |
| | | | | VIL | -0.5 | - | 1.0 | V |
| | | | | VOH (Io = -1.5 mA) | 4.0 | - | 5.2 | V |
| | | | | VOL (Io = 1.5 mA) | - | - | 1.1 | V |
| 23 | AUXIO2 | Input/ Output | Digital | VIH | 4.0 | - | 5.2 | V |
| | | | | VIL | -0.5 | - | 1.0 | V |
| | | | | VOH (Io = -1.5 mA) | 4.0 | - | 5.2 | V |
| | | | | VOL (Io = 1.5 mA) | - | - | 1.1 | V |
| 24 | AUXIO1 | Input/ Output | Digital | VIH | 4.0 | - | 5.2 | V |
| | | | | VIL | -0.5 | - | 1.0 | V |
| | | | | VOH (Io = -1.5 mA) | 4.0 | - | 5.2 | V |
| | | | | VOL (Io = 1.5 mA) | - | - | 1.1 | V |
| 25 | ME | - | Analog | This is GND port for microphone. | | | | |