

MODEL: FZ709

GENERAL TECHNICAL DESCRIPTION

The equipment under test (EUT) is car stereo with FM/MP3/USB/BLUETOOTH and Hand Free Combination. Bluetooth module operates from 2402 MHz to 2480 MHz. It's powered by 12V battery installed in vehicle. Its consists of Radio , MP3 music playing , USB audio streaming , Bluetooth Audio streaming , external music playing and mobile phone hands free mode when operating with Bluetooth.

The antenna used is **Printed F Antenna**.

The circuit description listed as follows;

MICOM

| Category | Part Name | Part Number | Description |
|----------|---------------|-------------|----------------------------------|
| IC | M32C | M30879FLBGP | Microcontroller for car receiver |
| Crystal | Quartz (X101) | 10MHz | Clock for M32C |

SWITCH

| Category | Part Name | Part Number | Description |
|----------|-----------|-------------|--|
| IC | IC1, IC4 | PCA9532 | Touch sensors for panel |
| IC | IC2, IC3 | ATA2508 | Digital Contact Controller for front panel |

MELA

| Category | Part Name | Part Number | Description |
|----------|-----------|-------------|---------------------------------|
| IC | IC3 | TC94A34FQ | Processor for car receiver |
| IC | IC2 | TMP92F028FG | USB controller for car receiver |
| IC | IC1 | 341S2094 | MCU |
| Crystal | X1 | 16.93 MHz | Clock for IC3 |
| Crystal | X4 | 32.768 kHz | Clock for IC2 |
| Crystal | X3 | 32.768 kHz | Clock for IC1 |

CONTROL and POWER IC

| Category | Part Name | Part Number | Description |
|----------|-----------|-------------|---------------------------|
| IC | IC402 | LA7202 | Power IC for car receiver |
| IC | IC105 | HA13166 | Power Supply & charger IC |

TUNER

| Category | Part Name | Part Number | Description |
|----------|-----------|-------------|---------------------------|
| IC | Tuner IC | FAE391-EC1 | Tuner IC for car receiver |
| Crystal | X201 | 4.33MHz | |
| Crystal | X202 | 7.2MHz | |

BLUETOOTH MODULE

| Category | Part Name | Part Number | Description |
|------------|-----------------|----------------------|--------------------------------|
| IC | U3 | N/A | External Flash Memory |
| Crystal | X1 | 26 MHz | Crystal Oscillator for BT unit |
| IC | U2 | CSR 57E687BU723AP | Bluetooth IC |
| Components | TR1,C21,C22.C54 | N/A | Filter |
| IC | IC105 | 39WF1601 | Voltage Regulator |