Product Profile

FUJITSU

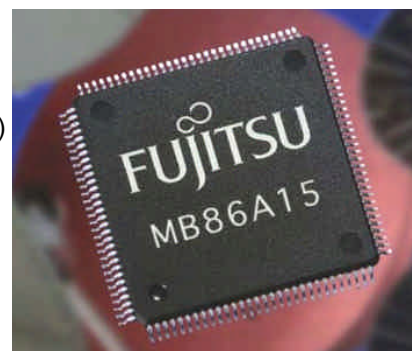# MB86A15PMT-G-BND

QPSK Silicon Tuner

OVERVIEW

Fujitsu's MB86A15PMT-G-BND is a tuner and QPSK demodulator for digital satellite broadcasting in a single 120 pin package. All functions necessary for receiving DVB-S signals (AGC, direct conversion, PLL, QPSK demodulator and FEC) are implemented.

Even inductors and vari-cap diodes for the high frequency oscillation circuit are included. This means that no analogue fine tuning is necessary in mass production.

FEATURES

- DVB-S (SCPC) and DSS compatible
- No external inductors and variable capacitance diodes required
- Supply voltages : +5V, +3.3V and +2.5V, (30V for tuning is not required)
- Input frequency range : 950MHz to 2150MHz
- Input signal level per channel : typ. -75dBm to -10dBm
- Symbol rates: 1Mbaud to 45 Mbaud
- Carrier capture range : ±5MHz
- Automatic IQ detection
- Automatic detection of Viterbi code rates (DVB: 1/2, 2/3, 3/4, 5/6, 7/8)
- I^2C bus interface
- DiSEqC® 1.x compatible
- Built-in carrier frequency offset monitor (via I^2C® bus interface)
- C/N Monitoring function (via I^2C® bus interface)
- Total power consumption: less than 1.5W (at 45Mbaud, decreases at lower baud rates)
- Package: 120 pin plastic LQFP (FPT-120P-M21)
- Ambient temperature: 0°C to +70 °C

- Application programming interface software (API) in source code will be provided by Fujitsu.
- Evaluation board including monitor software for PC is available.
  This software offers graphical BER display, bargraphs for signal strength/quality
  and transponder administration including DiSEqC control.

ORDERING INFORMATION

Part No.	Description
MB86A15PMT-G-BND MB86A15PMT-G-BND-E1	• Single Chip QPSK Silicon Tuner • Single Chip QPSK Silicon Tuner, E1: Lead(Pb) free package
MB86A15-DK01	• Development Kit for MB86A15PMT-G-BND, including: Main board, I^2C Interface board, Parallel port cable, Cable for power supply, CDROM storing all documentation and software plus PCB data
Contact Information	eMail: multimedia_info@fme.fujitsu.com

I^2C is a registered trademark of Philips corporation
Windows is a registered trademark of Microsoft corporation
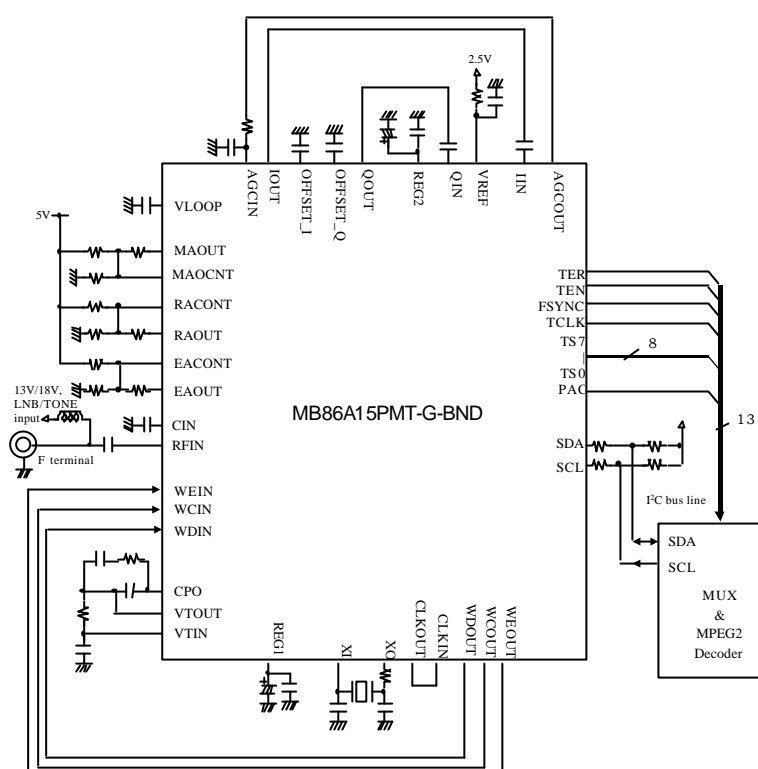*DiSEqC is a registered trademark of Eutelsat*

Figure 1: Basic Connection Example

Worldwide Headquarters