# Product Brief



# TUA6039

Full 3-Band, Low Power RF Tuner IC with Integrated IF AGC Amplifier

TAIFUN TUA6039 is a Tuner IC incorporating a mixer-oscillator function and an IF AGC amplifier with a digitally programmable phase locked loop (PLL). Both analog and digital standards for all terrestrial and cable applications are supported. With the high level of system integration and use of Bipolar technology, this IC provides cost effective and good performance solution to Tuner module and NIM (Network Interface Module) manufacturers. \*

## Applications

- Suitable for PAL, NTSC, SECAM, DVB-C, DVB-T, T-DMB, DAB, ISDB-T and ATSC tuners
- Focus on stationary applications for TV reception

### Features

- Supply voltage from 3 to 5.5 volts
- Bipolar technology for lower cost
- Narrow-band AGC detector for internal tuner
- AGC buffer output
- Low phase noise
- Full ESD protection
- Power consumption: 330mW@3.3 volts

## IF-Amplifier

- 4 IF pins to connect a true 2 pole bandpass
- Symmetrical SAW driver
- Fully balanced IF AGC amplifier

## PLL

- I<sup>2</sup>C bus
- 6 reference divider ratios
- 4 charge pump currents
- 4 independent I<sup>2</sup>C addresses, pin-programmable
- High voltage VCO tuning output
- Four PNP ports
- Internal LOW/MID/HIGH band-switch
- X-tal oscillator, 4 MHz
- X-tal buffer output

#### Power Management

■ Bus controlled power down mode

\*Infineon TUA6041 / TUA6045 in BiCMOS technology are targeting at portable applications where low power consumption is required.

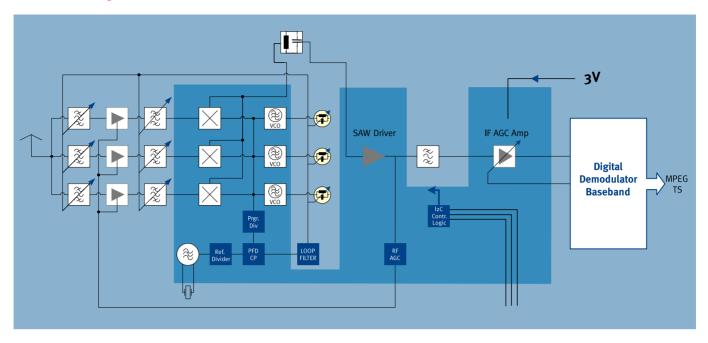
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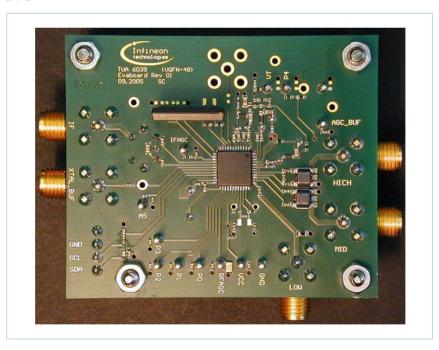


Never stop thinking

## Block Diagram



# TUA6039 Evaboard



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