

TENTATIVE TOSHIBA CMOS DIGITAL INTEGRATED CIRCUITS SILICON MONOLITHIC

TC90A74N, TC90A74F

NICAM / IGR AUDIO SIGNAL PROCESSORS

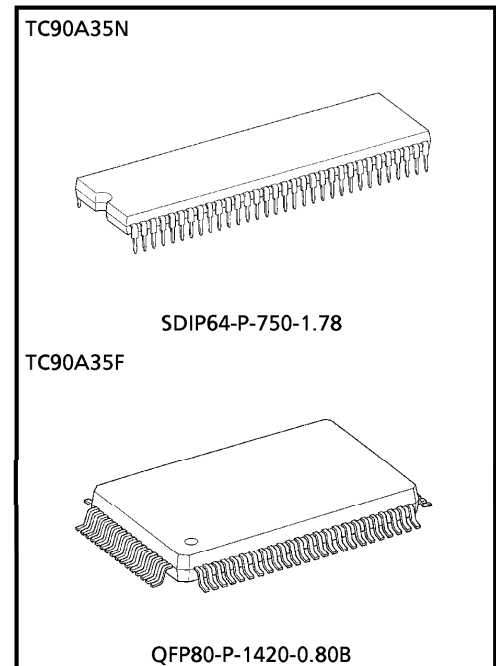
These LSIs are designed to decode PCM and FM aural signals in UK sound multiplex broadcasts (NICAM728). In addition, they also can decode IGR sound multiplex broadcasts.

The QPSK modulating signal in UK sound multiplex broadcasts are capable of doing digital QPSK demodulation and PCM decoding, and also can demodulate 1-channel FM sound signal. (Simultaneous NICAM and FM outputs are not supported.)

Using a digital PLL for QPSK demodulation and a digital OSC for FM demodulation, these can modulate I, B/G and any carrier used, with a single crystal. In addition, they allow for significant reduction in external part counts and materialize adjustment-free operation.

FEATURES

- Decodes NICAM sound.
- Decodes FM sound.
- Decodes 2-carrier FM (IGR) sound.
- Uses digital PLL and digital OSC for multicarrier capability.
- Contains digital emphasis circuit for FM and PCM.
- Interfaces with a microcomputer via the I²C bus.
- Uses AGC circuit to stabilize input signal levels.
- Operates with a single crystal (18.432 MHz).
- Greatly reduces part counts thanks to digital processing.
- Operates with a single 5V power supply.
- Package : QFP80 or SDIP64



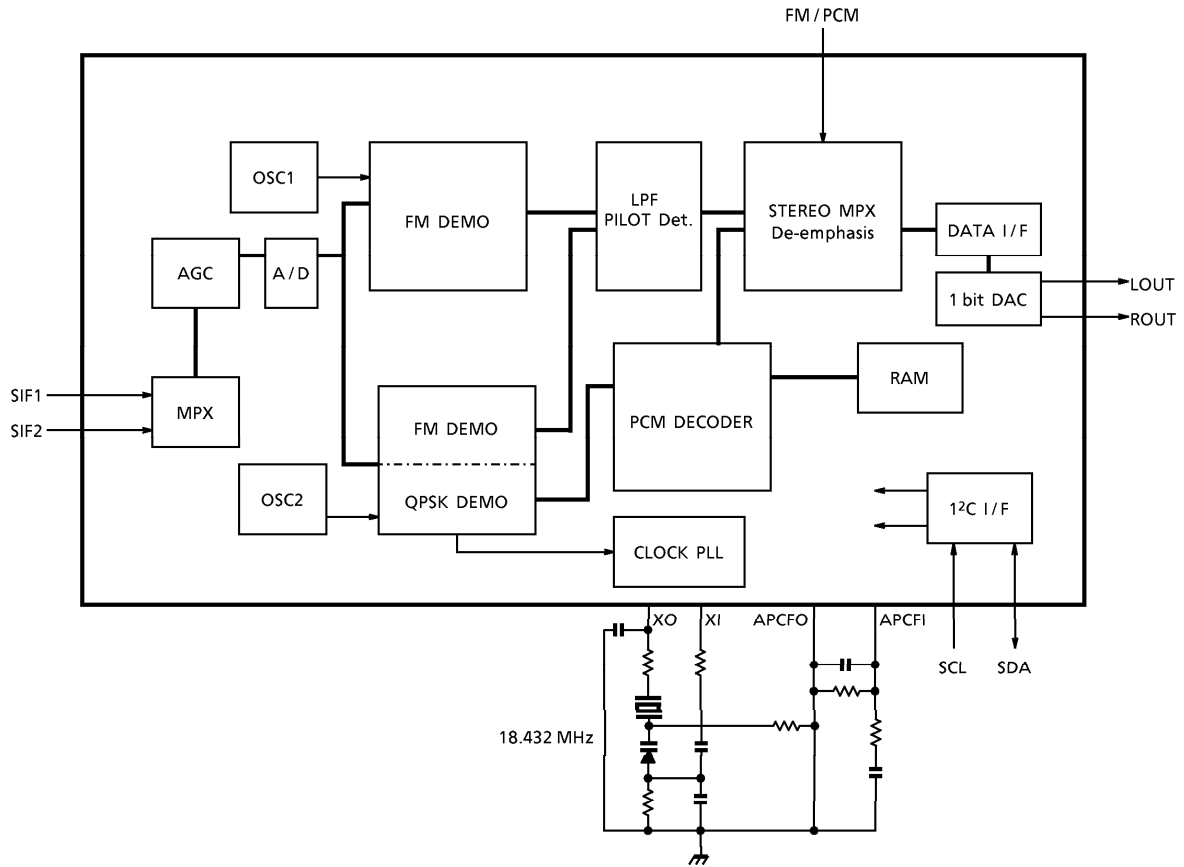
Weight
SDIP64-P-750-1.78 : 8.85 g (Typ.)
QFP80-P-1420-0.80B : 1.6 g (Typ.)

(*) : These products are under development. Specifications are subject to change without notice.

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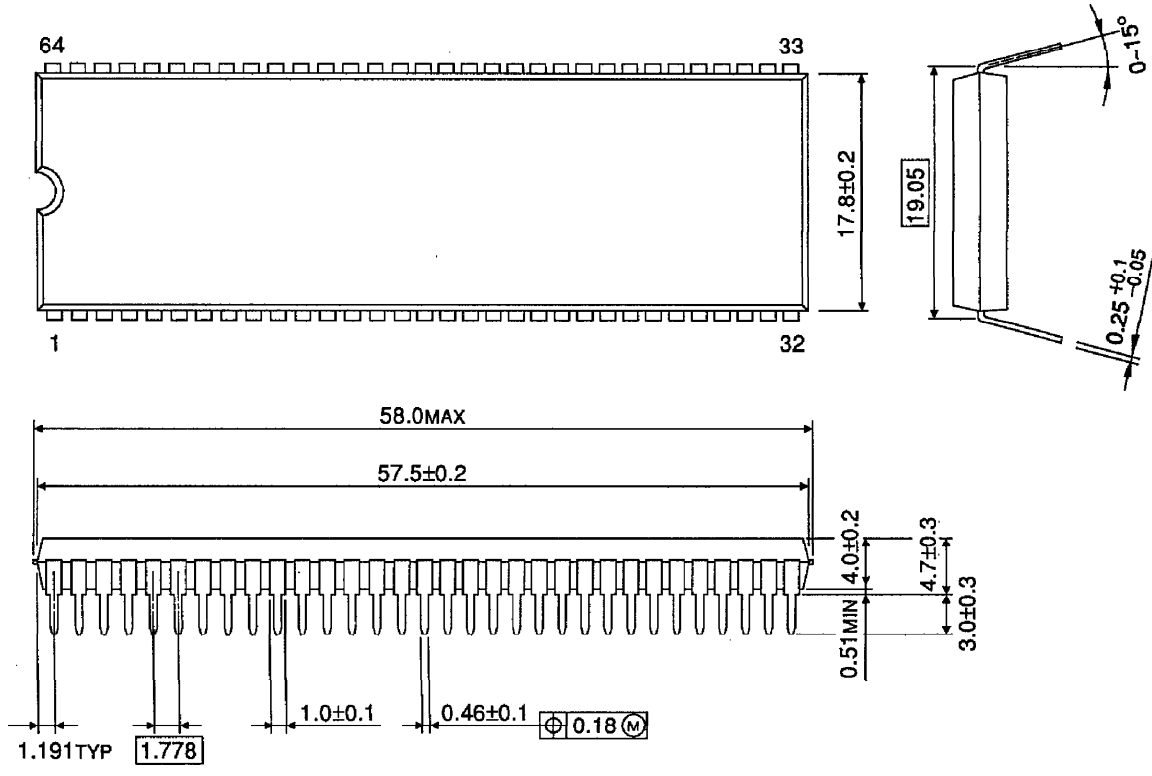
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BLOCK DIAGRAM



PACKAGE DIMENSIONS
SDIP64-P-750-1.78

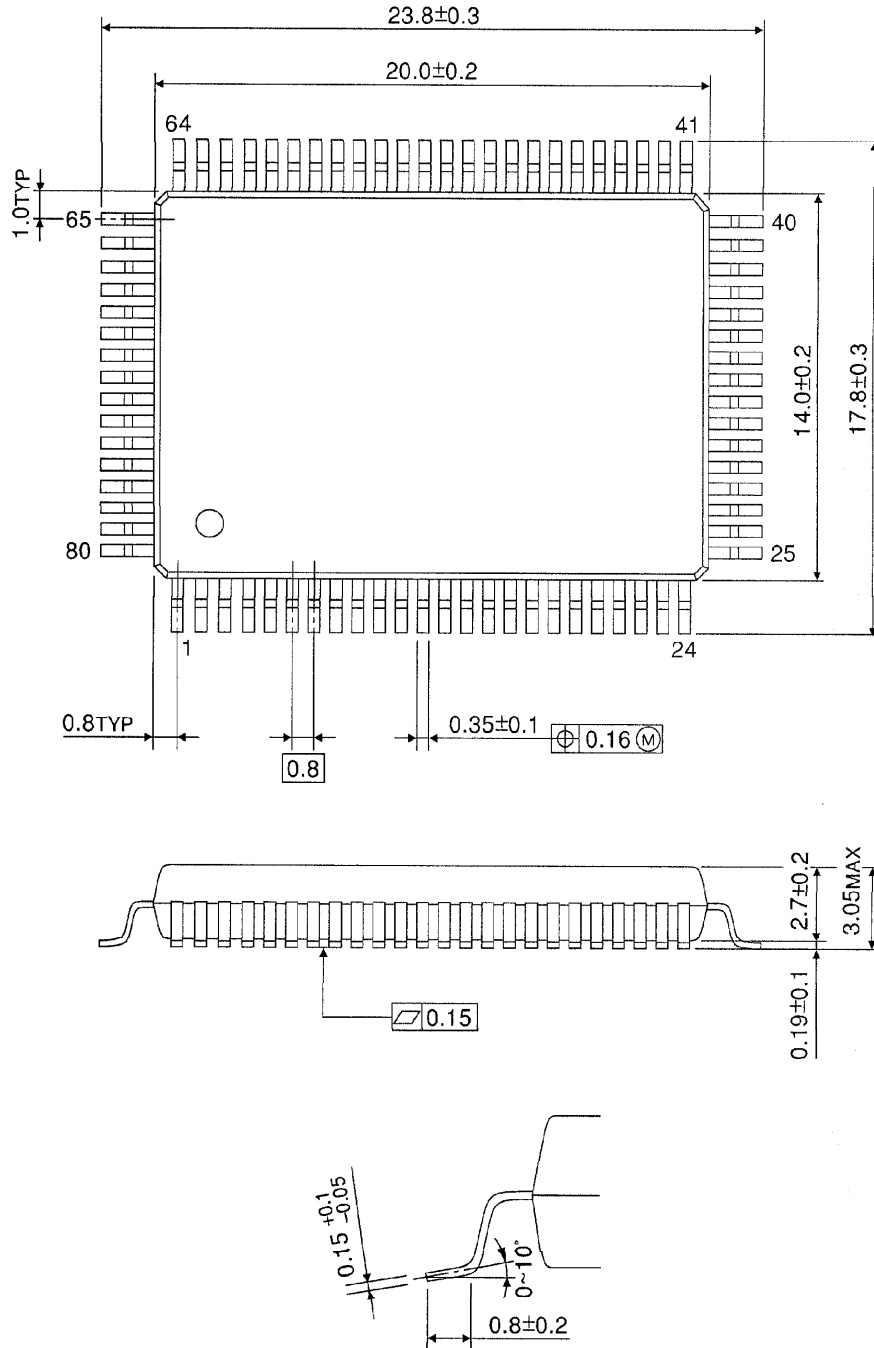
Unit : mm



Weight : 8.85 g (Typ.)

PACKAGE DIMENSIONS
QFP80-P-1420-0.80B

Unit : mm



Weight : 1.6 g (Typ.)