STMicroelectronics presents the STV0370, a single-chip, fully integrated, ATSC, cable (ITU-T J83B) and out-of-band digital demodulator and tuner.

Combining this digital demodulator with the STi7710, the industry-leading set-top box decoder, leads to the lowest cost platform available on the market.

This solution meets the requirements of multiple digital TV standards worldwide.

STV0370 is the ideal front-end IC required to fulfill US digital TV standards. It provides transport stream interface for in-band video (ATSC or cable) and out-of-band downstream data channel.

STV0370 is part of a complete set-top box reference design including the STi7710 (HD-7710 brick).

Figure 1. STV0370 optimized front-end IC for US digital TV
STV0370

FEATURES

- Fully integrated high-performance 10-bit and 8-bit A/D converters.
- Support ATSC (8VSB) terrestrial standard
- Support InBand QAM ITU-T J83B FEC standard
- Support downstream interactive OOB-QPSK signalling
- Fully integrated OOB superheterodyne downconversion tuner
- I²C interface and repeaters for tuners control
- Transport stream interface (serial and parallel)
- Low-cost LQFP-128 package with small footprint and exposed paddle.

PART NUMBERING

Table 1. Order codes

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>STV0370</td>
<td>Terrestrial, cable and out-of-band digital demodulator</td>
</tr>
<tr>
<td>STV0370-NIM-T</td>
<td>ATSC/QAM/OOB front-end promotion kit TMM Can tuner DTT7600 + STV0370</td>
</tr>
</tbody>
</table>

REVISION HISTORY

Table 2. Revision history

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision</th>
<th>Description of changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>December-2004</td>
<td>1</td>
<td>First issue</td>
</tr>
</tbody>
</table>

Information furnished is believed to be accurate and reliable. However, STMicroelectronics assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of STMicroelectronics. Specifications mentioned in this publication are subject to change without notice. This publication supersedes and replaces all information previously supplied. STMicroelectronics products are not authorized for use as critical components in life support devices or systems without express written approval of STMicroelectronics.