



## Your partner

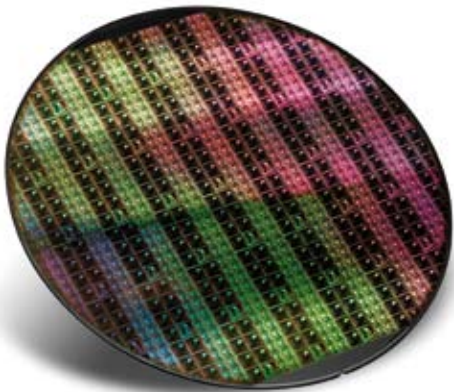
With over 20 years experience in the design and manufacture of advanced semiconductor components, e2v provides broadband data converters with high resolution (from 6 to 12 bits), high sampling rates (from 250 Msps to 5Gps) and wide bandwidth (up to 5GHz).

e2v broadband data converters integrate high-performance analogue processing with digital logic on the same integrated circuit to provide electronics designers with true high IF sampling data converters for all types of advanced receiver designs.

e2v leverages its IP resources with state-of-the-art industrial and manufacturing know-how to provide ADCs and DACs for all types of applications: from commercial or industrial grades for cost sensitive designs to military and space grade screenings where performance and quality levels are mission critical.

## Silicon Technology

e2v data converters incorporate the most advanced silicon technologies from European and American foundries, optimised to meet the requirements of customer specific applications. Coupled with this technology portfolio is e2v's proven proprietary folding and interpolating data converter design architecture, enabling best-in-class IF and high IF performance for broadband receiver designs.



# Product overview



## Broadband Data Converters



### ADC 12-bit 500Msps (AT84AS001 Series)

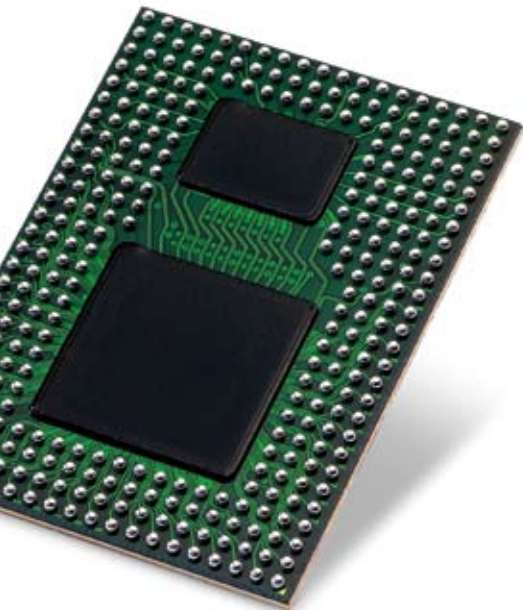
- SFDR 75 dBc/ SNR 61 dB @ 500 Msps/250 MHz
- SFDR 73 dBc/ SNR 60 dB @ 500 Msps/400 MHz
- Serial interface (gain and offset adjust, built-in-test, etc.)
- Low BER ( $10^{-14}$ ) at full data rate
- 2.4 W power consumption
- Commercial & Industrial RoHS EBGA192



12-bit 500Msps elected ultimate analogue product of the year by EETimes.

### ADC 10-bit 2.5 Gsps with 1:2/4 DMUX (EV10AS150 Series)

- 4.5 GHz Full Power Bandwidth
- ENOB 8.3 bit, SFDR -61dBc @ 2.5 Gsps Fin 500 MHz
- ENOB 8.0 bit, SFDR -58dBc @ 2.5 Gsps Fin 2495 MHz
- Integrated 1:2, 1:4 (selectable) DMUX
- External interleaving via 3-Wire Serial Interface
- Commercial and industrial RoHS & non RoHS EBGA317 packages



### ADC Quad 10-bit 1.25 Gsps (EV10AQ190 Series)

- Low power Quad 10-bit ADC operating up to 5Gsps
- Selectable Full Power Bandwidth up to 3 GHz
- ENOB 8.8 bit, SFDR 65 dBc@1.25 Gsps Fin 100 MHz
- ENOB 7.8 bit, SFDR 57 dBc@1.25 Gsps Fin 1.2 GHz
- SPI interface (ADC selection, interleaving: gain, offset, phase, etc...)
- 1.4 W per channel
- Low BER ( $10^{-16}$ ) at full data rate
- Commercial RoHS EBGA380 package



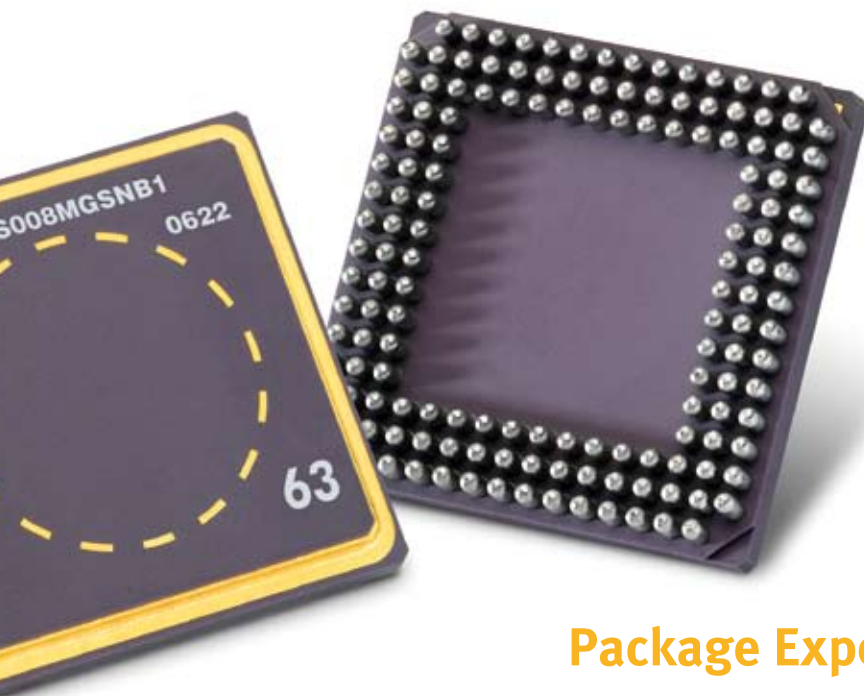
### ADC Quad 8-bit 1.25Gsp/s (EV8AQ160 Series)

- Four channel (1.25 Gsp/s), two channel (2.5 Gsp/s) and one channel (5 Gsp/s) operation
- SFDR 56 dBc, SNR 45 dB, ENOB 7.3 bit @ 1.25 Gsp/s/620 MHz
- Selectable analog input bandwidth (500 MHz to 2 GHz)
- SPI interface (ADC selection, interleaving: gain, offset, phase etc.)
- 1W per channel
- Commercial RoHS EBGA380 package



### ADC Dual 8-bit 1Gsp/s/500Msp/s (AT84AD001B/004B)

- SFDR 54 dBc/ SNR 42 dB/ 6.8bit ENOB @ 1 Gsp/s/500 MHz
- Provided with serial interface (interleaving, DMUX selection, gain and offset adjust, etc.)
- 700mW per channel
- Commercial and Industrial leaded LQFP144 and LQFP144-ep RoHS-green package



### DAC 12-bit 3Gsp/s with 4:1 MUX

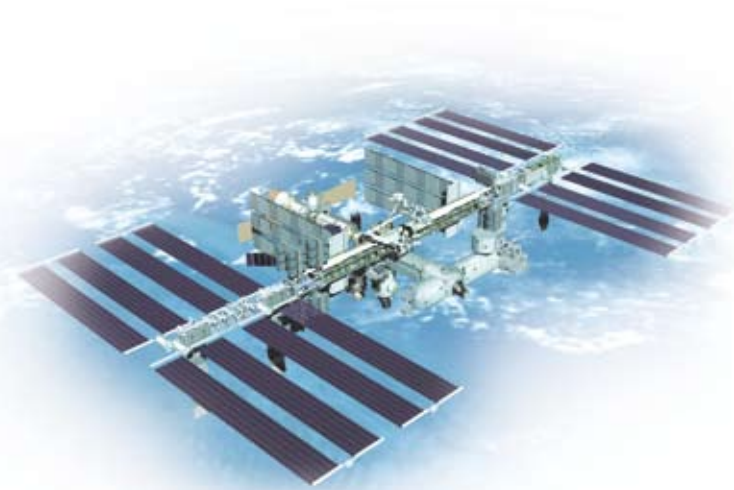
- NPR 52 dB @ 3Gsp/s (10-bit equivalent)
- SFDR (baseband NRZ mode)
- -77 dBm@3Gsp/s (-3dBfs output)
- SFDR (2nd Nyquist RTZ mode)
- -75 dBm@3Gsp/s (-3dBfs output)
- Selectable NRZ/RTZ
- Low 1W power consumption
- fpBGA 196 package

## Package Expertise

e2v supplies data converters with a wide range of packaging solutions, from high volume packages (QFN, LQFP or EBGA) to specialised hermetic ceramic packages (CI-CGA or CQFP) for demanding environments such as defence or satellite markets. Today e2v continues to support these applications while offering lead-free RoHS packages for most devices.

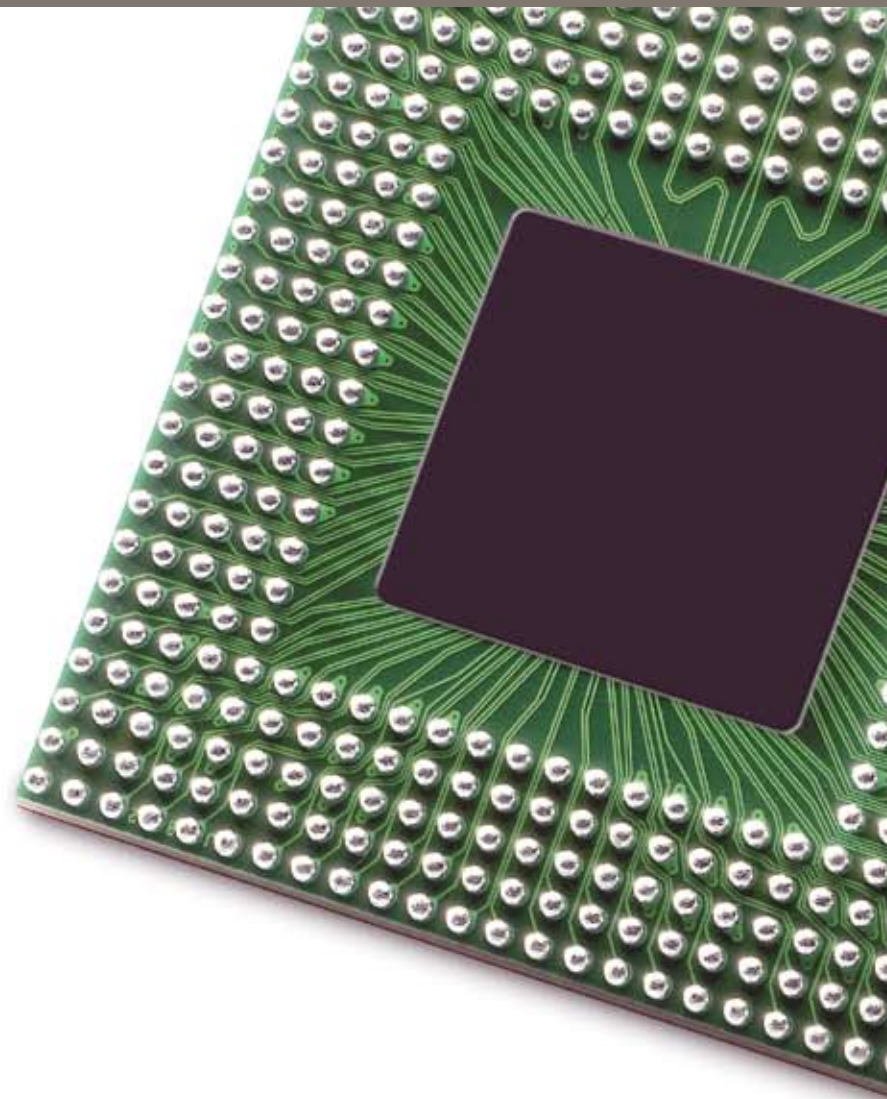


Broadband data converters are incorporated in a varied range of applications; from mission critical software radio and satellite communication systems to test and measurement, oscilloscopes, custom high speed data acquisition systems, next generation telecom and medical imaging. In these applications, the emphasis is placed on providing next-level performance and a competitive advantage.



## Custom Solutions

e2v has an extensive track record of providing custom data converters for industrial, military and space applications either through custom ASSP or full ASIC data converter designs. Our design teams are available to discuss your particular needs. Please contact your local e2v sales and marketing representative for more details.



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