



POWER METERING IP Platform

35 years of experience

MEET WITH THE PLATFORM

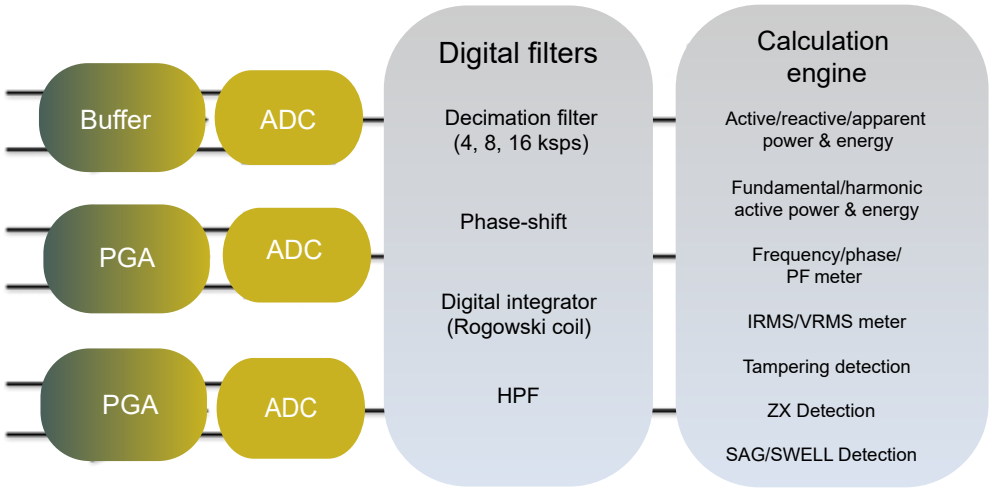
Designed to deliver precise energy measurement, Dolphin Semiconductor's Shark platform is tailored to ensure compliance with Class 0.2 s standards for accurate billing. Its highly accurate analog front-end (AFE) reduces errors in power calculations, making it suitable for both single-phase (residential) and three-phase (industrial) applications. By supporting both configurations within a single IP, it simplifies design processes, accelerates development timelines, and enhances flexibility, allowing scalability across various power metering solutions while minimizing costs and complexity.

APPLICATIONS

- Single-phase meter
- Three-phase meter



One fits all



Main benefits

- Low-noise at low-frequency
- Low offset
- Very low gain error < 0.01% (for class 0,1)
- Integrated power computation algorithms
- Pin and BOM cost reduction
- Synchronized channels and phase shifting calibration

Key features

- 22-24 bit $\Delta\Sigma$ ADC
- Only 0.14 mm² total IP footprint
- Built-in Power Energy Computer (PCE)
- Programmable data rate up to 32 ksp/s
- Exceeds IEC 62053-22 Classes 0.2 s requirements
- Chopper stabilized PGA
- Input DC blocking capacitor free

DOLPHIN
SEMICONDUCTOR