Introduction

CI00301IM2AIP is a single-slope column (column) type AD converter which is suitable for increasing the reading speed of CMOS sensor.
Since the column (column) type AD converter is operated in parallel, the reading speed of the CMOS sensor can be increased.

Feature

- **Internal Clock Rate**: 768MHz
- **A-D Type**: Single Slope Type
- **A-D Resolution**: 12 / 10bit
- **A-D Conversion Time**: 10bit: 7usec/Column, 12bit: 9usec/Column
- **Power Consumption**: 11uW
- **Column Pitch**: 2.2um
- **Noise Reduction**
- **PGA Gain**
- **Analog 2.8V / Digital 1.2V Power Supply**
- **Layout Size**: Column ADC Parts: X=339um x Y=634um
  RAMP Parts: X=236um x Y=829um
- **UMC 55nm CIS Process**: 1P-5M-1T 1.2v (Rvt) / 3.3v Transistor

Block Figure

![Block Figure](image-url)

Fig. 1-1 Top Level Block Diagram