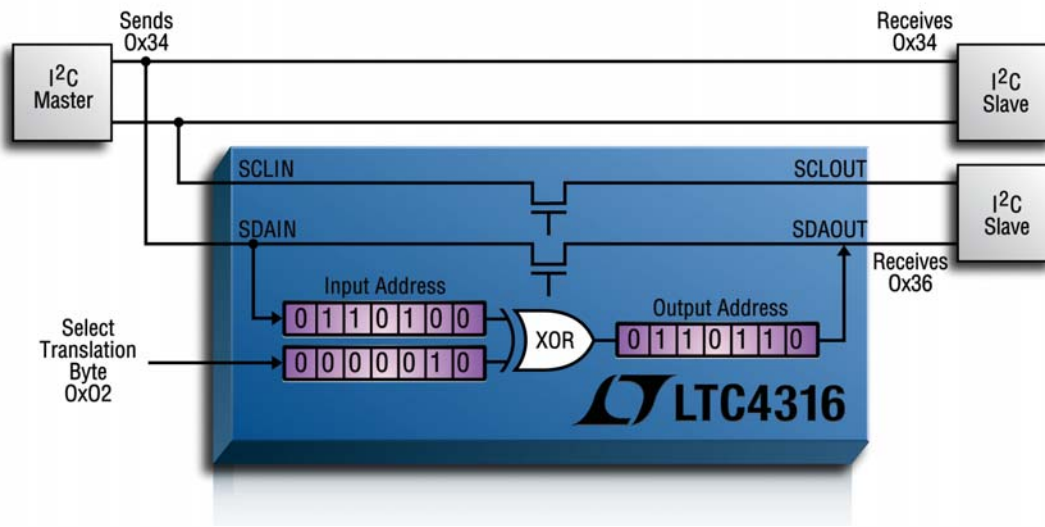


I²C/SMBus Address Translators



The LTC4316/LTC4317/LTC4318 are I²C/SMBus address translators that bridge two or more segments of an I²C bus, reading incoming addresses on the master side and transmitting a different 7-bit I²C address to the slave side to avoid address conflicts. Only discrete resistors are needed to select the new address and no software programming is required. Up to 127 different address translations are available.

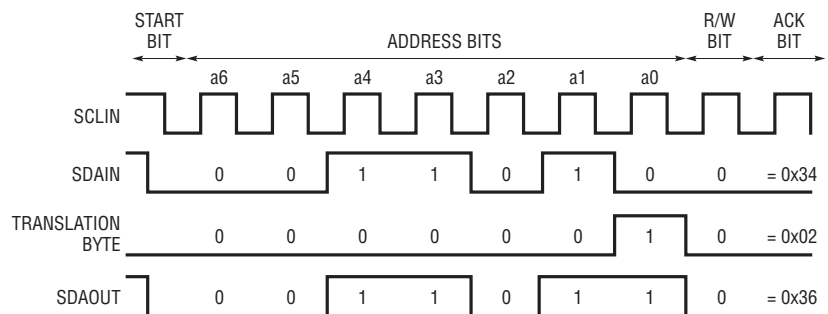
Features

- Allows Multiple Slaves with the Same Address to Coexist on the Same Bus
- Resistor Configurable Address Translation
- No Software Programming Required
- SMBus, I²C and I²C Fast Mode Compatible
- Pass-Through Mode Allows General Call Addressing
- ±4kV HBM ESD
- Level Translation for 2.5V, 3.3V and 5V Buses
- Stuck Bus Timeout
- Prevents SDA and SCL Corruption During Live Board Insertion and Removal

Part Selection

Part Number	Number of Input Channels	Number of Output Channels	Packages
LTC4316	1	1	3mm × 3mm DFN-10, MSOP-10
LTC4317	1	2	5mm × 3mm DFN-16
LTC4318	2	2	4mm × 4mm QFN-20

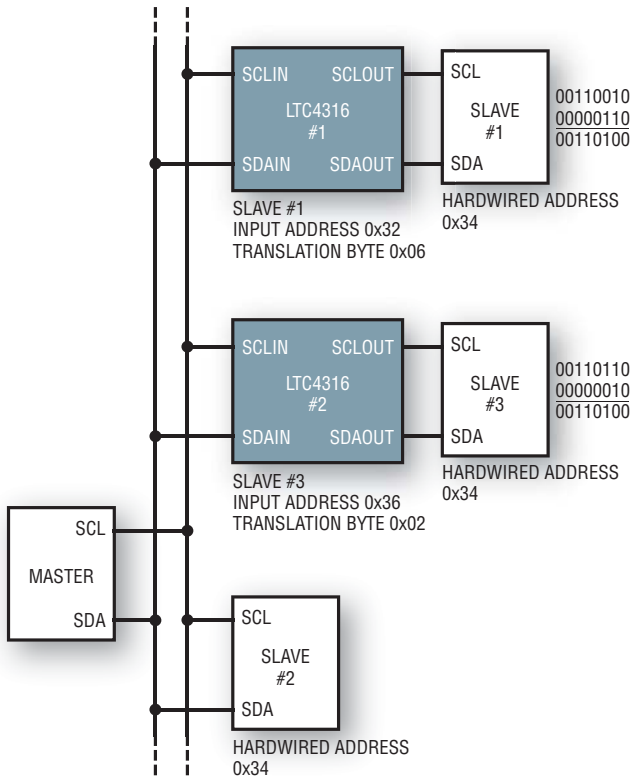
Timing Diagram Example



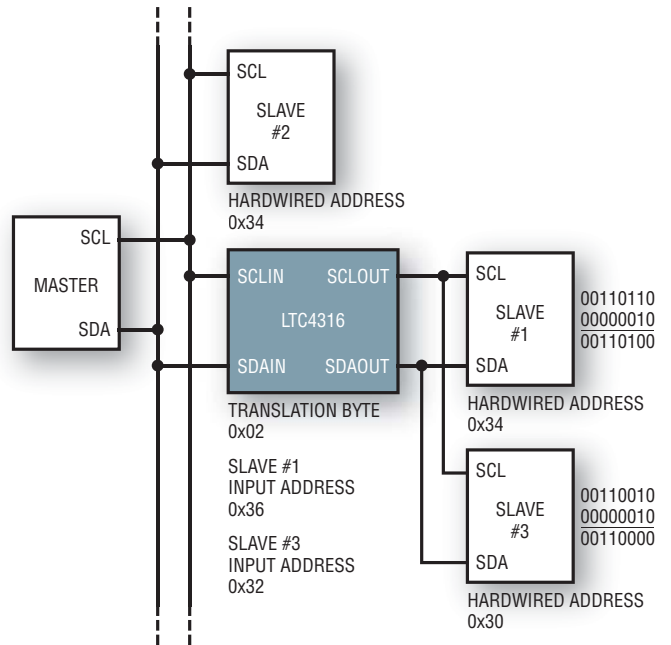
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Configurations

Two Independent Address Translations



Two Slaves Sharing One LTC4316



Part Comparison

