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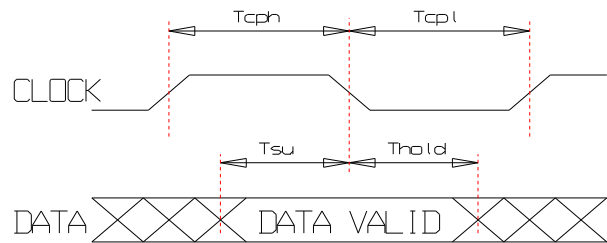
Legacy Mode™

The SA3216 and SA3624 switches from [E³] offer a pin- and command-compatible replacement option for customers currently using LC16 and LC24 switches. The Legacy Mode™ allows for drop-in replacement without the need for any hardware changes. SA switches self-initialize and do not require a permanent clock.

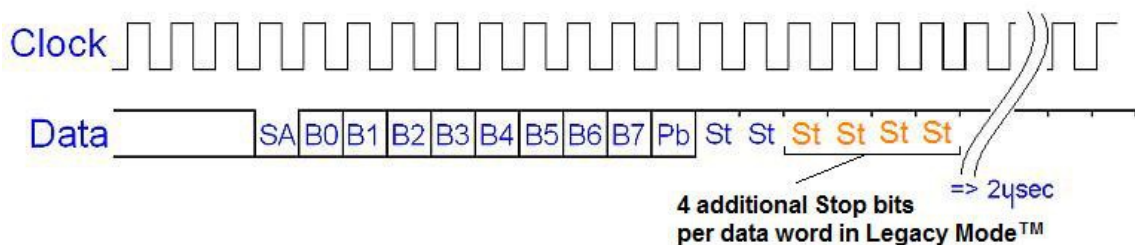
In order for the SA switches to convert the legacy protocol for the SA switches timing and data word adjustments must be made as outlined below:

Bit-Timing

Clock frequency max	Fmax	2 MHz
Clock frequency min	Fmin	64 kHz
Clock phase low max	Tcpl	31 µs
Clock phase low min	Tcpl	100 ns
Clock phase high max	Tcph	31 µs
Clock phase high min	Tcph	100 ns
Hold data min	Thold	10 ns
Setup data min	Tsu	40 ns



Data Byte Format



Start bit	low	SA
Data bit	low / high	b0 - b7 (LSB first, MSB last)
Parity bit	low / high	Pb
6 Stop bits	high	St
pause of 2µs		

Note: In Legacy Mode the data word length is 16 bits! 4 Stop Bits MUST be added to each data word. After the 16th bit there must be no Start bit for at least 2µs, while clock can still be generated.