

TABLE 1—SYNCHRONIZER TYPES AND USES

Type	Application	Input	Output	Restriction
Level signals	Synchronizes level	Level	Level	Input must be valid for at least two clock periods in the new domain. Each time output goes valid counts as a single event.
Edge-detecting	Detects rising or falling edge of input	Level or pulse	Pulse	Input must be valid for at least two clock periods in the new domain.
Pulse	Synchronizes single clockwise pulses	Pulse	Pulse	Input pulses must have at least two clock periods between them in the new domain.