

Appendix D. Functional Symbols Used in ALD Transistor Circuits

Name	Description	Std. Symbol	Symbols Prev. used in 7070
Positive AND	In-phase output is positive only when all inputs are positive. Out-of-phase output is negative for the above condition.	+A	
Negative AND	In-phase output is negative only when all inputs are negative. Out-of-phase output is positive for the above condition.	-A	
Amplifier	Provides increased strength to a detected signal or pulse.	AM	CSA CSAD TCSA DSA
DOT OR	An AND circuit whose output shares a common load with one or more other circuits to provide an OR function at the output.	AO	
Converter	Used to translate from one voltage level to another, or to change the amplitude of the voltage swing about the same reference level.	C	NIA XL INT
Converter Buffer	A converter block that uses the current mode transmission line driver signal sent from a transmitting frame to generate voltage swings referenced to voltage planes of other frames.	CB	
Converter Buffer Terminator	A converter buffer that terminates a coaxial line with its characteristic impedance.	CBT	
Capacitor Storage	Used as secondary storage devices.	CS	
Driver	Isolates a signal from its generating source and uses it to drive one or more other circuits without affecting or overloading the generating circuits. Can be used to supply the required power directly or only to activate the circuit through which power is actually supplied.	D	ROD RID DRID ROCD SLD DSS
Driver Core	Same as D, with the device being driven identified as a core.	DC	BID
Driver Emitter Follower	A driver, operating on the emitter follower principle, used for power amplification, impedance matching, and isolation without inversion. Often used as a logical element.	DE	
Driver, Emitter Follower, AND'ed	Same as DE but DOT AND'ed	DEA	
Driver, Emitter Follower, OR'ed	Same as DE but DOT OR'ed	DEO	
Driver, Line	Used to couple information between two widely separated points by means of coaxial line.	DL	
Delay	Delays a pulse for a certain specified constant time.	DLY	DEL PFN
Driver, Indicator	Driver operating into an indicating device.	DI	IND
Driver, Power	A power driver used to drive into multiple bases.	DP	
Driver, Relay	Same as D with the device being driven identified as a relay.	DR	RD

Name	Description	Std. Symbol	Symbols Prev. used in 7070
Driver Sample Pulse	Same as D, with the additional function of supplying a specific length pulse output when the input consists of a gate and a sample pulse spike. The input may also be the output of a current switching circuit without a gate.	DSP	
Driver, Sample Pulse OR'ed	Same as DSP but DOT OR'ed.	DSPO	
Driver, Terminator	A single-transistor class-A grounded-base amplifier used to terminate a transmission line.	DT	LT
Extender	Provides additional inputs to logical blocks and triggers. Adds to drivers the ability to drive more loads.	E	
Filter	Capacitor card used to filter voltage supplies.	FILT	
Gate	Provides a switching pulse of voltage or current, positive or negative, that conditions some other circuit so that it may become either activated or deactivated by one or more other pulses.	G	
Inverter	Changes a positive input to a negative output, or vice versa.	I	
Indicator	Visually indicates a function or an error.	IND	
Inverter, Power	Performs function of an inverter while also driving a line.	IP	PI
Limiter or Clamp	Limits or clamps a voltage or current to a predetermined value.	L	
Positive OR	In-phase output is positive if one or more input signals are positive. Out-of-phase output is negative for the above condition.	+O	
Negative OR	In-phase output is negative if one or more input signals are negative. Out-of-phase output is positive for the above condition.	-O	
DOT AND	An OR circuit whose output is connected to the output of one or more logic blocks to provide an AND function at the output.	OA	
Positive Exclusive OR	In-phase output is positive only when inputs differ (A up, B down, or B up and A down). Out-of-phase output is negative for the above conditions.	+OE	
Negative Exclusive OR	In-phase output is negative only when inputs differ (A up and B down, or B up and A down). Out-of-phase output is positive for the above conditions.	-OE	
Oscillator	A free-running non-stable multivibrator used to provide pulses of a given frequency and amplitude.	OSC	
Photocell	A circuit that has an input signal obtained from a photovoltaic cell whose light source is varied.	P	
Photocell Converter Buffer	Same as converter buffer except that signal source is a photovoltaic cell.	PCB	
Pulse Generator	Provides pulses of a particular frequency, rise time, and amplitude.	PG	
Load	Provides proper terminating impedance or optimum coupling of one circuit to another at the correct operating voltage level.	R	CBL INT DC