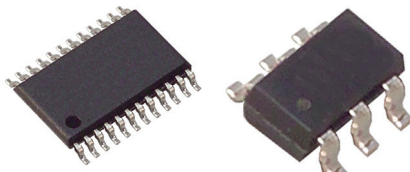


## STANDARD LOGIC ICS

## 74AVC SERIES CMOS LOGIC



## Features:

- DOC™ (Dynamic Output Control) Circuit Dynamically Changes Output Impedance, Resulting in Noise Reduction Without Speed Degradation
- Dynamic Drive Capability Is Equivalent to Standard

With the patented Dynamic Output Control (DOC™) circuitry, **AVC Series** has the shortest propagation delay time (tpd) at 3.3V, 2.5V, and 1.8V supply voltages (Vcc). This enables the fastest performance while also providing the lowest noise and mixed-voltage mode system support.

- Outputs With IOH and IOL of  $\pm 24$  mA at 2.5-V VCC
- Overvoltage-Tolerant Inputs/Outputs Allow Mixed-Voltage-Mode Data Communications
- Latch-Up Performance Exceeds 100mA Per JESD 78, Class II

Mfg. Part No.	Case Style	Supply Voltage	Stock No.	Tape & Reel
<b>Transceiver, Non Inverting</b>				
● SN74AVC2T45YZPR	BGA-8	1.2 V-3.6 V	24K4853	---
● SN74AVC1T45DCKR	SC-70-6	1.2 V-3.6 V	21J8969	0.15
● SN74AVCH1T45DCKR	SC-70-6	1.2 V-3.6 V	44J1473	0.16
● SN74AVC1T45DBVR	SOT-23-6	1.2 V-3.6 V	21J8967	---
● SN74AVCH1T45DBVR	SOT-23-6	1.2 V-3.6 V	44J1471	---
● SN74AVC2T45DCTR	SSOP-8	1.2 V-3.6 V	21J8975	0.22
● SN74AVC2T45DCTT	SSOP-8	1.2 V-3.6 V	21J8976	---
● SN74AVC4T245PWR	TSSOP-16	1.2 V-3.6 V	33K5891	---
● SN74AVC8T245PWR	TSSOP-24	1.2 V-3.6 V	10J9627	---
● SN74AVC16T245DGGR	TSSOP-48	1.2 V-3.6 V	21J8971	0.89
● SN74AVCB164245GR	TSSOP-48	1.4 V-3.6 V	83C7531	1.56
● SN74AVC2T45DCUR	VSSOP-8	1.2 V-3.6 V	21J8977	---
● SN74AVC2T45DCUT	VSSOP-8	1.2 V-3.6 V	21J8978	---
<b>Transceiver, Translating</b>				
● SN74AVC16T245ZQLR	BGA-56	1.2 V-3.6 V	21J8974	---
● SN74AVC8T245DGVR	TVSOP-24	1.2 V-3.6 V	10J9625	0.15
<b>Voltage Level Translator</b>				
● SN74AVCA406LZXYP	BGA-20	1.2 V-4.6 V	88K6638	---

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## SN74 LOGIC FAMILIES



Mfg. Part No.	Case Style	Output Current	Supply Voltage	Stock No.	Price Each
<b>AND Gate</b>					
● SN74ALS08N	DIP-14	8mA	4.5Vto5.5V	60K6789	0.37
● SN74LS11N	DIP-14	8mA	4.75Vto5.25V	08F6673	0.35
● SN74LS09N	DIP-14	8mA	4.75Vto5.25V	60K6853	0.14
● SN74F08N	DIP-14	20mA	4.5Vto5.5V	60K6800	0.65
● SN74ALS08D	SOIC-14	8mA	4.5Vto5.5V	08F5935	---
● SN74ALS11AD	SOIC-14	8mA	4.5Vto5.5V	35K0781	---
● SN74LS08D	SOIC-14	8mA	4.75Vto5.25V	08F6633	0.30
● SN74LS09D	SOIC-14	8mA	4.75Vto5.25V	35K0812	0.35
● SN74F08D	SOIC-14	20mA	4.5Vto5.5V	67K2827	---
<b>Inverter</b>					
● SN74ALS04BN	DIP-14	8mA	4.5Vto5.5V	60K6788	---
● SN74ALS05AN	DIP-14	8mA	4.5Vto5.5V	67K1025	0.45
● SN74LS05N	DIP-14	8mA	4.75Vto5.25V	08F6630	---
● SN74LS14N	DIP-14	8mA	4.75Vto5.25V	08F6782	0.67
● SN74LS04N	DIP-14	8mA	4.75Vto5.25V	60K6850	---
● SN74ALS04BD	SOIC-14	8mA	4.5Vto5.5V	08F5932	---
● SN74ALS05AD	SOIC-14	8mA	4.5Vto5.5V	52F2312	---
● SN74LS04D	SOIC-14	8mA	4.75Vto5.25V	72K9435	---
● SN74LS14D	SOIC-14	8mA	4.75Vto5.25V	76K1060	---
● SN74LS05D	SOIC-14	8mA	4.75Vto5.25V	67K2852	0.54
<b>NAND</b>					
● SN74ALS00AN	DIP-14	8mA	4.5Vto5.5V	67K1024	0.27
● SN74ALS10AN	DIP-14	8mA	4.5Vto5.5V	67K1026	---
● SN74LS03N	DIP-14	8mA	4.75Vto5.25V	60K6849	---
● SN74LS20N	DIP-14	8mA	4.75Vto5.25V	60K6870	0.57
● SN74LS30N	DIP-14	8mA	4.75Vto5.25V	60K6879	0.33
● SN74LS10N	DIP-14	8mA	4.75Vto5.25V	60K6854	0.38
● SN74LS00N	DIP-14	16mA	4.75Vto5.25V	60K6847	0.47

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## SN74 LOGIC FAMILIES (CONT.)

Mfg. Part No.	Case Style	Output Current	Supply Voltage	Stock No.	Price Each
<b>NAND</b>					
● SN74F10N	DIP-14	20mA	4.5Vto5.5V	08F6297	---
● SN74F00N	DIP-14	20mA	4.5Vto5.5V	67K1065	0.25
● SN74ALS00AD	SOIC-14	8mA	4.5Vto5.5V	08F5927	---
● SN74LS00D	SOIC-14	16mA	4.75Vto5.25V	72K9434	---
● SN74F00D	SOIC-14	20mA	4.5Vto5.5V	08F6288	---
<b>NAND Buffer</b>					
● SN74LS38N	DIP-14	24mA	4.75Vto5.25V	60K6884	---
● SN74F38D	SOIC-14	64mA	4.5Vto5.5V	35K0794	0.13
<b>NAND Schmitt Trigger</b>					
● SN74LS132N	DIP-14	8mA	4.75Vto5.25V	60K6859	---
<b>NOR</b>					
● SN74LS02N	DIP-14	8mA	4.75Vto5.25V	60K6848	---
● SN74LS27N	DIP-14	8mA	4.75Vto5.25V	59K0267	---
● SN74F02N	DIP-14	20mA	4.5Vto5.5V	08F6290	0.17
● SN74F02D	SOIC-14	20mA	4.5Vto5.5V	52F2625	---
<b>NOR Buffer</b>					
● SN74LS33N	DIP-14	24mA	4.75Vto5.25V	60K6880	0.77
<b>OR</b>					
● SN74ALS32N	DIP-14	8mA	4.5Vto5.5V	60K6791	---
● SN74LS32N	DIP-14	8mA	4.75Vto5.25V	08F7225	0.26
● SN74F32N	DIP-14	20mA	4.5Vto5.5V	60K6803	---
● SN74ALS32D	SOIC-14	8mA	4.5Vto5.5V	08F6036	---
● SN74LS32D	SOIC-14	8mA	4.75Vto5.25V	67K2856	0.28
● SN74F32D	SOIC-14	20mA	4.5Vto5.5V	67K2831	---
<b>XOR Gate</b>					
● SN74ALS86N	DIP-14	8mA	4.5Vto5.5V	67K1046	---
● SN74LS86AN	DIP-14	8mA	4.75Vto5.25V	60K6895	---

PIM\_12937

## TINYLOGIC® HIGH SPEED CMOS LOGIC



## Benefits:

- Reduces routing complexity
- Allows shorter metal traces to minimize EMI generation
- Prevents unnecessary power consumption from unused gates
- HS and HST family intended for 5V or very low speed applications
- UHS family ideal for high speed, low voltage operation
- ULP family ideal for extremely high speed low voltage operation
- ULPA family ideal for low power consumption, low voltage operation

Fairchild's **TinyLogic®** family consists of a broad spectrum of high speed, low power, CMOS single and dual gate logic functions in a choice of six space saving packages: SOT23-5, SC70 6-lead, US8 8-lead, and MicroPak 6 and 8 terminal leadless packages.

TinyLogic can facilitate efficient system designs in any application. Placement of single and dual logic functions exactly where needed simplifies signal routing while minimizing propagation delays and noise generation.

Tiny Logic offers single-gate functions in very small packages. **Mfg. part numbers with suffix X are supplied on cut tape.**

Tiny High Speed (HS) series performance similar to HC/VHC. CMOS-compatible inputs. Supply voltage: 2V-6V.

Ordering Guide					
NC7	XX	X	XX	XX	X
TinyLogic	1st letter: S=Single-Bit W=Dual-Bit N=Triple Bit 2nd letter: "blank"=HS T=HST Z=UHS P=ULP V=ULP-A	D=Diode U=Unbuffered	Device Type	Package Code: M5=SOT23-5 P5=SC70-5 P6=SC70-6 I6=MicroPak-6 I8=MicroPak-8 K8=US8	Special Variations X=Tape&Reel 3000&5000 "blank"=Tape&Reel 250

Mfg. Part No.	Case Style	Output Current	Supply Voltage	Stock No.	Tape Cut
<b>AND Gate</b>					
● NC7ST08P5	SC-70-5	2mA	4.5Vto5.5V	67K0812	---
● NC7S08P5X	SC-70-5	2.6mA	2Vto6V	58K1992	0.06
● NC7SP08P5X	SC-70-5	2.6mA	900mVto3.6V	82C9971	---
● NC7SV08P5X	SC-70-5	24mA	900mVto3.6V	55R1150	0.04
● NC7S208P5	SC-70-5	32mA	1.65Vto5.5V	34C1562	---
● NC7SZ11P6X	SC-70-6	32mA	1.65Vto5.5V	58K9467	0.41
● NC7ST08M5X	SOT-23-5	2mA	4.5Vto5.5V	58K1969	0.49
● NC7S08M5	SOT-23-5	2.6mA	2Vto6V	34C1577	---
● NC7S08M5X	SOT-23-5	2.6mA	2Vto6V	58K1991	0.49
● NC7S208M5X	SOT-23-5	32mA	1.65Vto5.5V	58K1975	0.54
● NC7WZ08K8X	US8-8	32mA	1.65Vto5.5V	58K2000	---
<b>Inverter</b>					
● NC7ST04P5	SC-70-5	2mA	4.5Vto5.5V	38C8124	---
● NC7ST04P5X	SC-70-5	2mA	4.5Vto5.5V	38C7557	---

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