



# Logic

## SELECTION GUIDE

ABT, LVT

CD4K/74C

**CROSSVOLT™**  
ALVC, LCX, LVX, VCX

FACT

### *FXL Voltage Translators*

HC/HCT

**TinyLogic®**  
HS, HST, UHS, ULP, ULP-A

VHC/VHCT

ALS, AS, FAST, FASTr

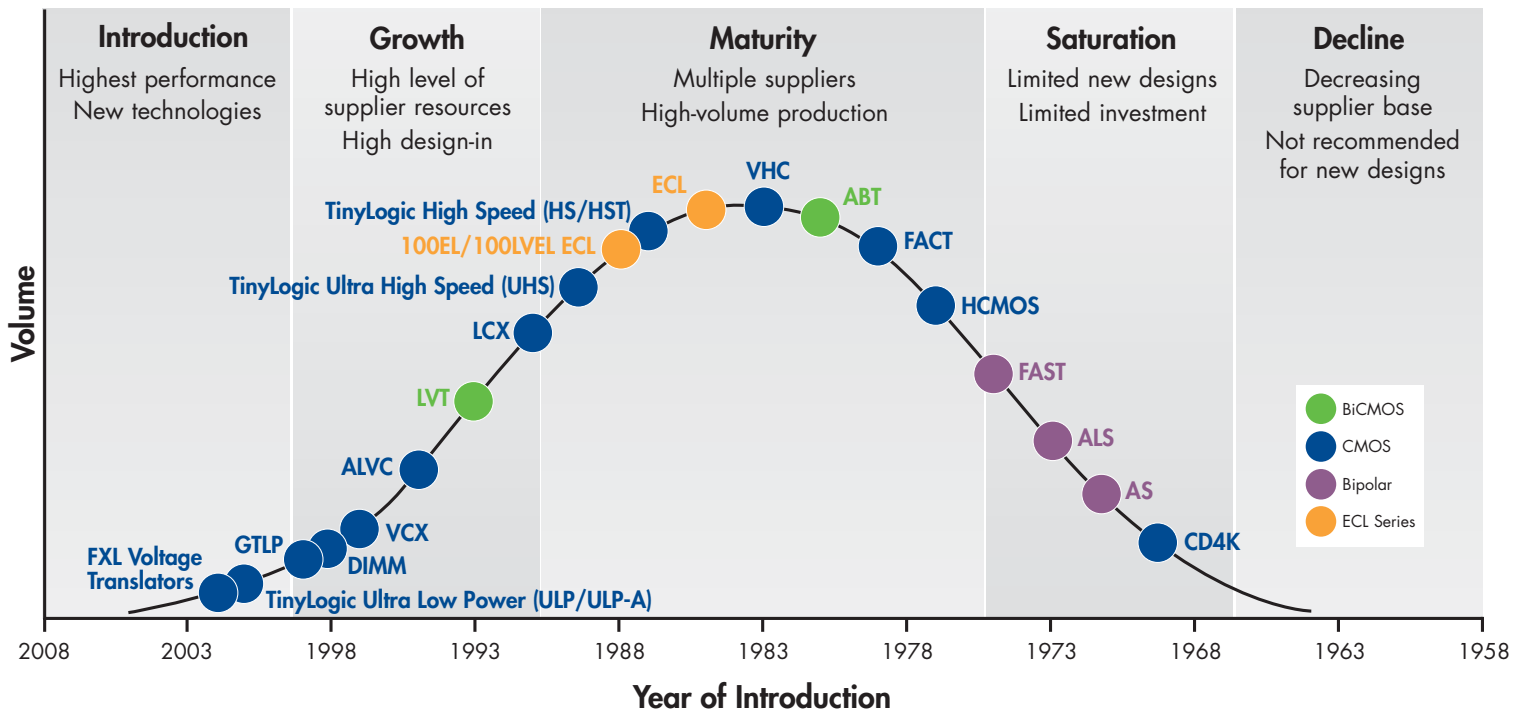
100EL/LVEL, 300 Series





Fairchild Semiconductor, a long-time, leading global supplier of high performance semiconductors, offers a broad range of logic products to meet your design needs. You will not only find the performance that you want, you will also find the right packaging, whether it is leaded or high density unleaded. For example, our TinyLogic™ family delivers space savings solutions for today's shrinking platforms. In addition, you can be assured that Fairchild offers long-term family support to help extend the life of your designs. With our commitment to providing the best customer support in the industry along with one of the largest portfolio of logic products, Fairchild is the supplier you can rely on now and into the future.

## Product Life Cycle



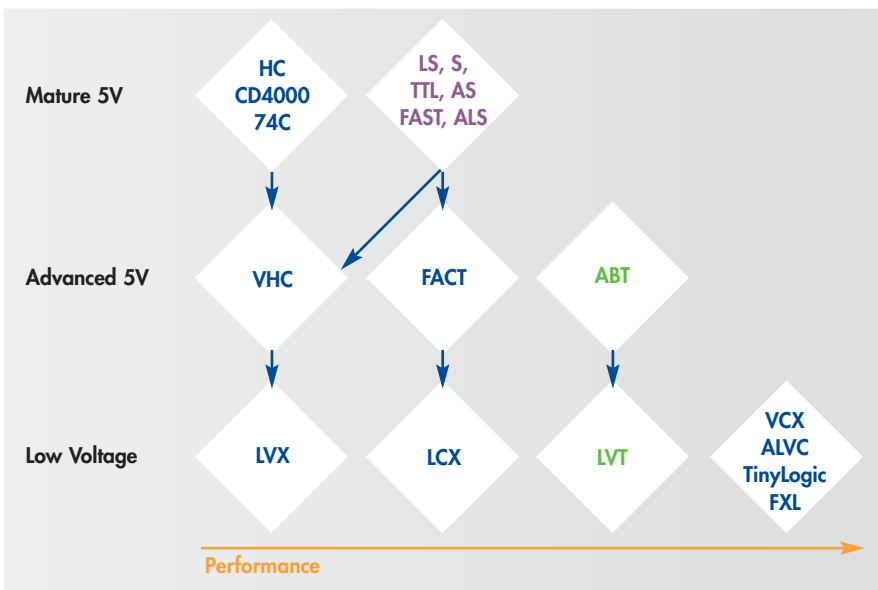
## How to Use this Guide

From the quick reference chart, select the attribute that is most important to you—switching speed, power minimization, drive capability, noise immunity, etc.—and note the family. Then consider other criteria to fine-tune your selection.

## Quick Reference Chart

Process Technology	High Speed	Low Noise	Low Static Power	High Drive	Low Voltage	Board Space	Voltage Translation
<b>BiCMOS 5V</b>							
	ABT			ABT			
<b>BiCMOS 3V</b>							
	LVT			LVT	LVT		
<b>CMOS 5V</b>							
	FACT	FACT QS	FACT			TinyLogic HS/HST	<b>LVX</b>
	TinyLogic UHS	HC/HCT	FACT QS				
		TinyLogic HS/HST	HC/HCT				
		VHC/VHCT	TinyLogic HS/HST/UHS				
			VHC/VHCT				
<b>CMOS 1.2V-3V</b>							
	LCX	LVX	LCX		ALVC	LCX DQFN	FXL
	TinyLogic UHS	TinyLogic HS	LVX		LCX	TinyLogic UHS/ULP/ULPA	VCX
	TinyLogic ULPA	TinyLogic ULP	VCX		LVX	VCX DQFN	
	VCX		TinyLogic HS/UHS		TinyLogic ULP		
			TinyLogic ULP		VCX		
<b>Bipolar</b>							
	FASTr	ALS		FASTr			
		FAST					
<b>ECL</b>							
	100 EL/LEVEL Series ECL						
	300 Series ECL						

## Logic Migration and Low Voltage Transition





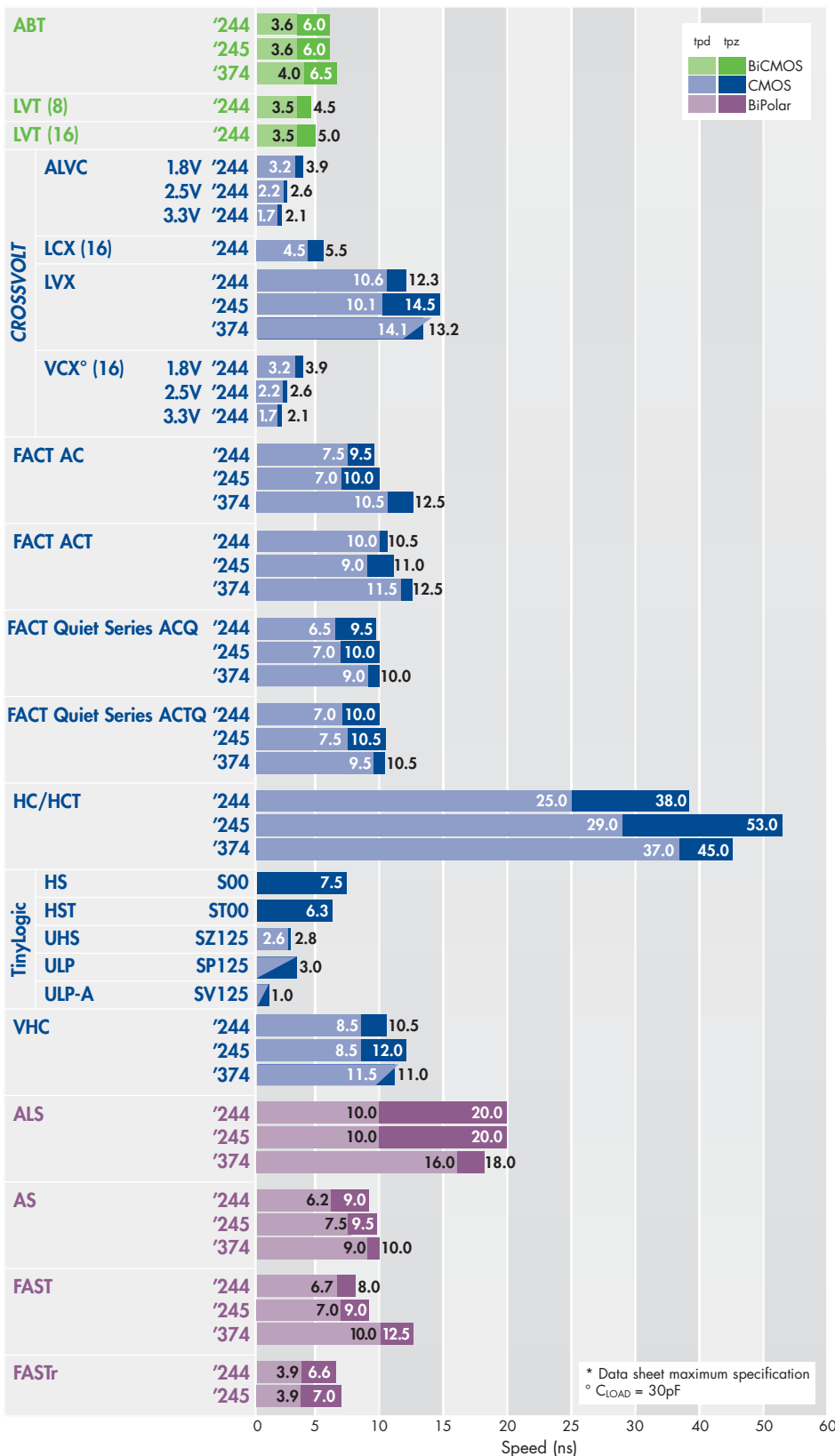
# Product Portfolio and Description Chart

	Buffers/Line Drivers	Transceivers	Registers/Flip-Flops	Latches	Counters	Multiplexers	Comparators	Parity Generator/Checker	Decoders/Demultiplexers	FIFOs/Arithmetic Functions	Gates	Video Support	Voltage Translators	25Ω Series Resistor Options	Boundary Scan (IEEE 1149.1)	16- 18- 32-bit Functions	8- 10- 12-bit Functions	1- and 2-bit Functions	
<b>BiCMOS</b>																			
ABT	●	●	●				●						●	●	●	●	●	●	<ul style="list-style-type: none"> <li>High-speed, high-drive and low-noise for superior system performance</li> </ul>
LVT	●	●	●	●									●	●					<ul style="list-style-type: none"> <li>High-speed, high-drive logic for 3.3V applications</li> </ul>
<b>CMOS</b>																			
CD4K	●	●	●	●	●			●			●								<ul style="list-style-type: none"> <li>Standard high-voltage CMOS products for high-noise environments</li> </ul>
CROSSVOLT™	ALVC	●	●	●	●						●					●			<ul style="list-style-type: none"> <li>Alternative to VCX</li> </ul>
	LCX	●	●	●	●	●			●		●		●						<ul style="list-style-type: none"> <li>5V-tolerant inputs and outputs</li> <li>Ideal for 3.3V applications requiring balanced drive capability, high-speed, and low-noise</li> </ul>
	LVX	●	●	●	●	●			●		●		●						<ul style="list-style-type: none"> <li>5V input tolerance allows 5V CMOS to interface with 3.3V systems. Includes specialized, dual-voltage translators and bus switch devices.</li> </ul>
	VCX	●	●	●	●						●		●		●				<ul style="list-style-type: none"> <li>High-speed CMOS enables interoperability between 3.3V and 2.5V systems, with 3.6V-tolerant inputs and outputs</li> </ul>
FACT™ AC/ACT	●	●	●	●	●	●	●	●	●	●	●								<ul style="list-style-type: none"> <li>General-purpose/broad-portfolio ACMOS family</li> </ul>
FACT Quiet Series™ ACQ/ACTQ	●	●	●	●				●			●				●				<ul style="list-style-type: none"> <li>Family extension specifically designed for noise-sensitive applications. Proprietary circuitry guarantees low EMI and low device-generated noise.</li> </ul>
FXL Voltage Translators	●	●										●		●					<ul style="list-style-type: none"> <li>Dual supply voltage translation from 1.2V to 3.6V</li> <li>Bi-directional, configurable bi-directional, or uni-directional data direction</li> </ul>
HC/HCT	●	●	●	●	●	●			●		●								<ul style="list-style-type: none"> <li>Low CMOS device-generated noise and EMI available in the moderate-speed performance range</li> <li>Not recommended for new designs</li> </ul>
TinyLogic®	HS	●	●		●						●								<ul style="list-style-type: none"> <li>General-purpose single-, dual- and triple-gate logic</li> </ul>
	HST										●								<ul style="list-style-type: none"> <li>TTL-compatible single-, dual- and triple-gate logic</li> </ul>
	UHS	●	●	●	●						●								<ul style="list-style-type: none"> <li>High-performance single- and dual-gate logic with 5V over-voltage tolerance on inputs and outputs</li> </ul>
	ULP/ULP-A	●	●	●	●														<ul style="list-style-type: none"> <li>Ultra-low power/voltage single-, dual- and triple-gate logic</li> </ul>
VHC/VHCT	●	●	●	●	●			●		●									<ul style="list-style-type: none"> <li>The natural migration for HCMOS users who need more speed for their low-power, low-noise, low-drive applications</li> <li>Offered in fine-pitch packages</li> </ul>
74C	●	●	●	●	●			●		●									<ul style="list-style-type: none"> <li>Application-specific, high-voltage CMOS products for high-noise environments</li> </ul>
<b>Bipolar</b>																			
ALS	●	●	●	●	●	●	●	●	●	●	●								<ul style="list-style-type: none"> <li>Low-output noise and low power consumption for an advanced TTL logic family</li> </ul>
AS	●	●	●	●	●	●	●	●	●	●	●								<ul style="list-style-type: none"> <li>A high-speed, high-drive TTL family</li> <li>Not recommended for new designs</li> </ul>
FAST®	●	●	●	●	●	●	●	●	●	●	●			●					<ul style="list-style-type: none"> <li>Optimal speed-to-power portfolio of Advanced Schottky TTL families</li> </ul>
FAST™	●	●	●	●										●					<ul style="list-style-type: none"> <li>Fast TTL logic available</li> <li>A speed-improved, design-enhanced version of FAST</li> </ul>
<b>ECL</b>																			
F100K Series	●	●	●	●	●	●	●	●	●	●	●	●							<ul style="list-style-type: none"> <li>ECL with low power and excellent price/performance</li> <li>Socket replacement of F100K 100 Series</li> </ul>
100EL/LVEL Series	●	●											●						<ul style="list-style-type: none"> <li>1.0GHz to 2.0 GHz</li> <li>Specified as EclINPS™* replacement</li> </ul>

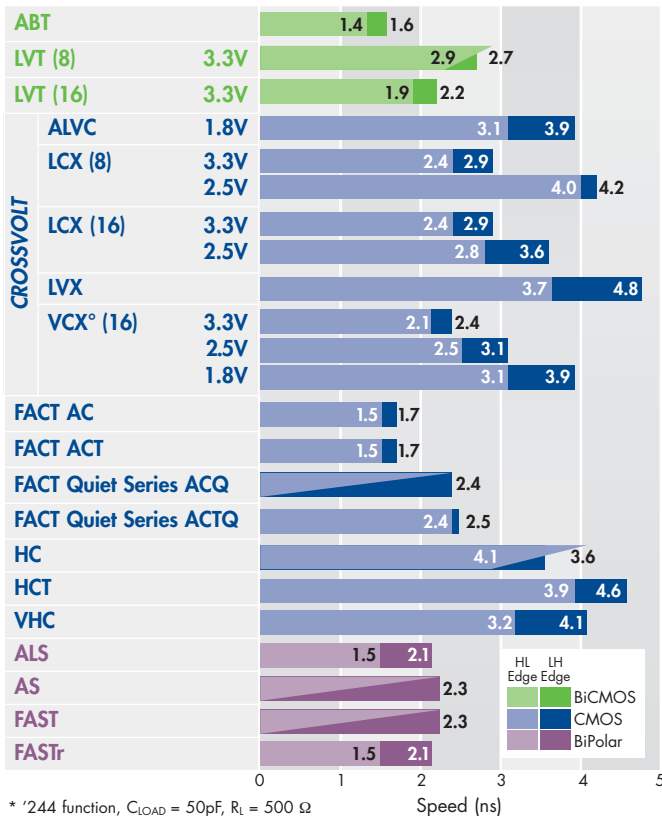
\* Trademark of ON Semiconductor

\*\* See TinyLogic HS, UHS and ULP-A for 1- and 2-bit families with similar performance to AVLC, LCX, VCX, HC, and VHC.

## Propagation Delay\*



## Output Rise and Fall Time\*



## Dynamic Current Consumption\* (mA)

	1MHz	10MHz	35MHz	70MHz	90MHz	
<b>BiCMOS</b>						
ABT	19.7	43.8	115.9	266.0	303.3	
LVT (8)	11.0	29.3	75.8	133.4	170.2	
LVT (16)	12.5	90.1	246.2	494.3	580.1	
<b>CMOS</b>						
CROSSVOLT	ALVC	9.9	61.9	146.8	253.7	312.7
	LCX (8)	2.2	20.9	64.8	146.6	163.1
	LCX (16)	6.7	61.9	160.0	294.4	375.1
	LVX	2.0	19.4	64.0	100.1	106.3
	VCX (16)	9.9	61.9	146.8	253.7	312.7
	FACT AC	3.9	38.9	105.5	352.8	404.2
FACT Quiet Series ACQ	5.4	52.3	139.5	206.0	218.5	
HC	3.8	37.9	132.0	181.5	—	
VHC	3.1	30.8	103.0	180.7	192.1	
<b>Bipolar</b>						
ALS	14.1	41.0	126.7	240.2	393.8	
FAST	42.9	69.4	136.6	221.1	246.8	
FASTr	38.6	58.0	94.5	198.2	232.4	

\* '244 function, multiple outputs switching @ 50pF, C<sub>LOAD</sub>.  
All figures represent typical performance values.

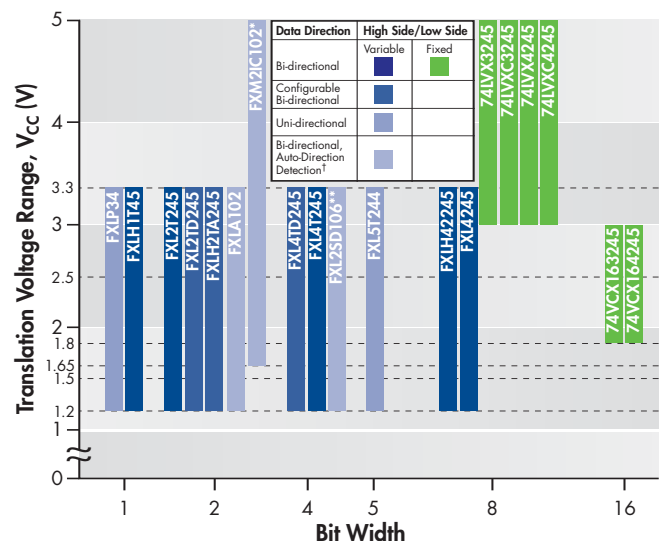
## Noise\*

	V <sub>OLP</sub> (V)	V <sub>OLV</sub> (V)		
<b>BiCMOS</b>				
ABT	0.6	-1.0		
LVT/LVTH	3.3V	0.8	-0.8	
<b>CMOS</b>				
CROSSVOLT™	LCX (8)	2.5V	0.5	-0.5
		3.3V	0.7	-0.7
	LCX (16)	2.5V	0.3	-0.3
		3.3V	0.4	-0.5
	LVX		0.3	-0.2
	VCX° (16)	1.8V	0.2	-0.2
2.5V		0.6	-0.6	
3.3V		0.8	-0.8	
FACT AC		1.6	-1.5	
FACT ACT		1.6	-1.6	
FACT Quiet Series ACQ		0.9	-0.6	
FACT Quiet Series ACTQ		0.9	-0.5	
HC		0.5	-0.3	
HCT		0.5	-0.3	
TinyLogic ULP	1.8V	**	**	
VHC		0.6	-0.6	
VHCT		0.7	-0.7	
<b>Bipolar</b>				
ALS		0.2	-0.5	
AS		0.8	-1.4	
FAST		0.6	-0.3	
FASTr		0.8	-0.8	

Note: R values are typical at 4.5 Volts

\* '244 function, C<sub>LOAD</sub> = 50pF, R<sub>L</sub> = 500Ω, seven outputs switching, minimum input skew, typical values  
\*\* No overshoot/undershoot ringing evident for oscilloscope measurements  
° C<sub>LOAD</sub> = 30pF

## Voltage Translation



## Family Specification Comparison\*

	Specified Power Supply** (Nominal V <sub>CC</sub> ) (V)	Compatibility Input† (V <sub>IL</sub> /V <sub>IH</sub> )	Output†† (V <sub>OL</sub> /V <sub>OH</sub> )	Input Current† (I <sub>IL</sub> /I <sub>IH</sub> )	Drive†† (I <sub>OL</sub> /I <sub>OH</sub> )	Supply Current† (I <sub>CC</sub> )	Speed† (t <sub>PD</sub> ) (ns)	
<b>BiCMOS</b>								
ABT	5	TTL	TTL	-5μA/5μA	-32mA/64mA	30mA	3.6	
LVT (8)	3.3	TTL,CMOS	TTL,CMOS	-5μA/1μA	-32mA/64mA	5mA	3.5	
LVT (16)	3.3	TTL,CMOS	TTL,CMOS	-5μA/1μA	-32mA/64mA	5mA	3.5	
<b>CMOS</b>								
CD4K <sup>∞</sup>	3-15	CMOS	TTL, CMOS	10pA	-1.25mA/8mA	3μA	40.0	
CROSSVOLT	ALVC	1.8/2.5/3.3	TTL,CMOS	TTL,CMOS	-5μA/5μA	-24μA/24μA	20μA	3.0
	LCX (8)	2.5/3.3	TTL,CMOS	TTL,CMOS	-5μA/5μA	-24mA/24mA	10μA	6.5
	LCX (16)	2.5/3.3	TTL,CMOS	TTL,CMOS	-5μA/5μA	-24mA/24mA	20μA	4.5
	LVX (8)	3.3	TTL,CMOS	TTL,CMOS	-1μA/1μA	-4mA/4mA	40μA	12.0
	VCX <sup>∞∞</sup>	1.2/1.5/1.8/2.5/3.3	TTL,CMOS	TTL,CMOS	-5μA/5μA	-24mA/24mA	20μA	2.5/3.2
FACT AC	3.3/5	CMOS	TTL,CMOS	-1μA/1μA	-24mA/24mA	80μA	7.5	
FACT ACT	5	TTL,CMOS	TTL,CMOS	-1μA/1μA	-24mA/24mA	80μA	10.0	
FACT Quiet Series ACQ	3.3/5	CMOS	TTL,CMOS	-1μA/1μA	-24mA/24mA	80μA	6.5	
FACT Quiet Series ACTQ	5	TTL,CMOS	TTL,CMOS	-1μA/1μA	-24mA/24mA	80μA	7.0	
HC	2/4.5/6	CMOS	TTL,CMOS	-1μA/1μA	-6mA/6mA	80μA	25.0	
HCT	5	TTL, CMOS	TTL, CMOS	-1μA/1μA	-6mA/6mA	80μA	25.0	
TinyLogic	HS <sup>∞</sup>	2.0/3.0/4.5/6 <sup>∞∞</sup>	CMOS	TTL, CMOS	-1μA/1μA	-2.6mA/2.6mA	10μA	21.0
	HST <sup>∞</sup>	4.5/5/5.5	TTL, CMOS	TTL, CMOS	-1μA/1μA	-2.0mA/2.0mA	10μA	30.0
	UHS <sup>∞</sup>	1.65/2.5/3.3/5	CMOS	TTL, CMOS	-10μA/10μA	-32mA/32mA	20μA	4.5
	ULP <sup>∞</sup>	0.9/1.2/1.5/1.8/2.5/3.3	CMOS	TTL, CMOS	-1μA/1μA	-2.6μA/2.6μA	5μA	7.0
	ULP-A <sup>∞</sup>	0.9/1.2/1.5/1.8/2.5/3.3	CMOS	TTL, CMOS	-1μA/1μA	-24μA/24μA	5μA	3.0
VHC	3.3/5	CMOS	TTL,CMOS	-1μA/1μA	-8mA/8mA	40μA	8.5	
VHCT	5	TTL,CMOS	TTL,CMOS	-1μA/1μA	-8mA/8mA	40μA	9.5	
74C	3-15	CMOS	TTL, CMOS	-1μA/1μA	-14mA/12mA	300μA	70.0	
<b>Bipolar</b>								
AS	5	TTL	TTL	-1.0mA/20μA	-15mA/64mA	90mA	6.2	
ALS	5	TTL	TTL	-0.1mA/20μA	-15mA/24mA	27mA	10.0	
FAST	5	TTL	TTL	-150μA/5μA	-15mA/64mA	75mA	3.9	
FASTr	5	TTL	TTL	-1.6mA/5μA	-15mA/64mA	90mA	6.5	
LS	5	TTL	TTL	-200μA/20μA	-15mA/24mA	54mA	18.0	
S	5	TTL	TTL	-200μA/20μA	-15mA/64mA	120μA	9.0	
TTL <sup>∞</sup>	5	TTL	TTL	-1.6μA/40μA	-250mA/40mA	41mA	30.0	
<b>ECL</b>								
100 EVL	-5.5 to -4.2	ECL	ECL	0.5μA/150μA	-1.8 into 50Ω	-36mA	0.385	
100 LEVEL	-3.0 to -3.8	ECL	ECL	0.5μA/150μA	-1.8 into 50Ω	-30mA	0.435	
300 Series	-5.7 to -4.2	ECL	ECL	0.5μA/240μA	-1.8 into 50Ω	-65mA	1.55	

\* '244 function used unless otherwise noted

\*\* except for ECL and HC

† input levels recognized by the device

†† input levels the device is capable of driving

† maximum specification at maximum specified V<sub>CC</sub>

†† at maximum specified V<sub>CC</sub>

∞ 7407 used for specifications

∞∞ CD4010 used for specifications

∞ NAND Gate (00) function for data




























∞∞ C<sub>LOAD</sub> = 30pF

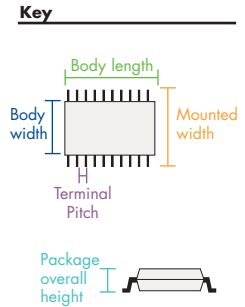


## Package Availability

	MicroPak	SOT23, SC70 (5/6 pin) and US8	SSOP (48/56 pin)	TSSOP Type 1	TSSOP (48/56 pin)	SSOP Type II (20/24 pin)	QSOP (20/24 pin)	SOIC EIAJ	SOIC JEDEC	PDiP	BGA	DQFN	MLP
<b>BiCMOS</b>													
ABT			•	•	•	•		•	•	•			
LVT		•	•	•	•	•		•	•		•		
<b>CMOS</b>													
CD4K/74C				•					•	•			
CROSSVOLT	ALVC		•	•	•				•		•		
	LCX			•	•	•		•	•		•	•	
	LVX			•	•			•	•				
	VCX			•	•	•			•		•	•	
FACT				•		•		•	•	•			
FACT QS			•	•		•	•	•	•	•			
Voltage Translators	•	•			•							•	•
HC/HCT				•				•	•	•			
TinyLogic	HS/HST	•	•										
	UHS	•	•										
	ULP/ULP-A	•											
VHC/VHCT				•	•			•	•	•			
<b>Bipolar</b>													
ALS						•		•	•				
AS								•	•	•			
FAST						•		•	•	•			
FASTr			•			•		•	•	•			
LS/S								•	•	•			
TTL									•	•			
<b>ECL</b>													
100EL/LEVEL									•	•			
300 Series									•	•			

## Packaging

	Terminal Count	Package (Code)	Mounted Width (mm/in)	Body Width (mm/in)	Body Length (mm/in)	Overall Height (mm/in)	Terminal Pitch (mm/in)	Mounted Area (mm/in)
	5	SOT23 (M5)	2.84/0.112	1.60/0.063	2.92/0.115	1.1/0.043	0.95/0.037	8.29/0.012
	5/6	SC70 (P5) (P6)	2.10/0.083	1.25/0.049	2.0/0.079	0.90/0.03	0.65/0.026	4.20/0.007
	6	MicroPak (L6)	1.0/0.039	1.0/0.039	1.45/0.057	0.55/0.021	0.50/0.020	1.45/0.002
	8	US8 (K8)	3.10/0.122	2.30/0.09	2.0/0.079	0.70/0.027	0.50/0.020	6.20/0.009
	8	MicroPak (L8)	1.60/0.062	1.60/0.062	1.60/0.062	0.55/0.021	0.50/0.020	2.56/0.003
	10	MicroPak (L10)	1.60/0.062	1.60/0.062	2.10/0.083	0.55/0.021	0.50/0.020	3.36/0.005
	14	SOIC (M)	6.0/0.231	3.85/0.153	8.60/0.340	1.50/0.061	1.27/0.050	51.60/0.078
	14	TSSOP (MTC)	6.40/0.252	4.40/0.173	5.0/0.197	1.20/0.047	0.65/0.026	32.0/0.050
	14	DQFN (BQ)	2.5/0.098	2.5/0.098	3.0/0.118	0.80/0.031	0.50/0.020	7.50/0.011
	16	SOIC (M)	6.0/0.231	3.85/0.153	9.90/0.390	1.50/0.061	1.27/0.050	59.40/0.090
	16	TSSOP (MTC)	6.40/0.252	4.40/0.173	5.0/0.197	1.10/0.043	0.65/0.026	32.0/0.050
	16	QSOP (QSC)	5.99/0.236	1.35/0.053	4.90/0.193	1.60/0.063	0.63/0.025	29.35/0.045
	16	DQFN (BQ)	2.50/0.098	2.50/0.098	3.0/0.118	0.80/0.031	0.50/0.020	8.75/0.013
	20	SOIC JEDEC (WM)	10.36/0.408	7.49/0.295	12.80/0.504	2.64/0.104	1.27/0.050	132.70/0.206
	20	TSSOP Type I (MTC)	6.40/0.252	4.39/0.173	6.60/0.260	1.10/0.104	0.65/0.025	132.70/0.206
	20	SSOP Type II (MSA)	7.80/0.307	5.31/0.209	7.19/0.283	2.05/0.081	.065/0.025	56.08/0.087
	20	QSOP (QSC)	5.99/0.236	3.94/0.155	8.69/0.342	1.60/0.063	0.64/0.025	52.05/0.087
	20	DQFN (BQ)	2.5/0.098	2.5/0.098	4.50/0.177	0.80/0.063	0.50/0.020	11.25/0.017
	24	SOIC (WM)	10.30/0.40	7.50/0.295	15.40/0.60	2.50/0.098	1.27/0.050	158.62/0.240
	24	QSOP (QSC)	5.99/0.236	3.89/0.153	8.66/0.341	1.45/0.057	0.63/0.025	51.87/0.080
	24	TSSOP (MTC)	6.40/0.252	4.40/0.173	7.80/0.307	1.10/0.043	0.65/0.026	49.92/0.077
	24	MLP (MP)	3.50/0.138	3.50/0.138	4.50/0.177	0.80/0.063	0.50/0.020	15.75/0.621
	48	TSSOP (MTD)	8.10/0.319	6.10/0.240	12.50/0.492	1.10/0.043	0.50/0.020	101.25/0.157
	54	BGA54 (G)	8.0/0.315	8.0/0.315	5.50/0.217	1.40/0.055	0.80/0.031	44.0/0.683
	56	TSSOP (MTD)	8.10/0.319	6.10/0.240	14.0/0.551	1.10/0.043	0.50 (.020)	113.0/0.175
	96	BGA96 (G)	5.50/0.216	5.50/0.216	13.50/0.531	1.40/0.055	0.80/0.031	74.25/0.115
	114	BGA114 (G)	5.50/0.216	5.50/0.216	16.0/0.630	1.40/0.055	0.80/0.031	88.0/0.136





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**POWER MANAGEMENT ICs**

**AC-DC: Power Factor Correction**

- Continuous Conduction Mode (CCM) PFC Controllers
- Critical (CrCM) / Boundary Conduction Mode (BCM) PFC Controllers
- PFC + PWM Combination (Combo) Controllers

**Isolated DC-DC**

- Green-Mode PWM Controllers
- Integrated Green-Mode PWM Regulators (Green FPS™)
- Integrated PWM Regulators (FPS™)
- Primary-side only CV/CC Controllers
- Standard SMPS PWM Controllers

**Non-Isolated DC-DC**

- Charge-Pump Converters
- Multi-phase Controllers
- Step-down Controllers (External Switch)
- Step-down Regulators (Integrated Switch)
- Step-up Regulators (Integrated Switch)

**Power Drivers**

- High Voltage Gate Drivers (HVIC)
- Low-Side Gate Drivers
- Synchronous Rectifier Controllers / Drivers
- Synchronous-Buck / Multi-phase Drivers

**Supervisory / Monitor ICs**

- Ground Fault Interrupt (GFI) Controllers
- Supervisors + PWM
- Temperature Sensors
- Voltage Supervisors / Detectors / Stabilizers

**Voltage Regulators**

- LDOs
- Positive Voltage Linear Regulators
- Negative Voltage Linear Regulators
- Shunt Regulators

**POWER SEMICONDUCTORS**

**Diodes & Rectifiers**

- Bridge Rectifiers
- Rectifiers
- Schottky Diodes & Rectifiers
- Small Signal Diodes
- Transient Voltage Suppressors
- Zener Diodes

**Integrated Power Solutions**

- DrMOS FET plus Driver Multi-chip Module
- IGBT Module
- Full Function Load Switches (IntelliMAX™)
- MOSFET/Schottky Combos
- Smart Power Modules (SPM®)
- Smart Switches

**Transistors**

- BJTs
- IGBT Discrete
- JFETs
- Load Switches
- MOSFETs
- MOSFET/Schottky Combos
- Small Signal Transistors

**TRIACs**

- TRIACs

**LIGHTING AND DISPLAY**

- CCFL Ballast IC
- CFL/Lighting Ballast Control IC
- Critical (CrCM)/Boundary Conduction Mode (BCM) PFC Controllers for Lighting
- High Voltage Gate Drivers (HVIC)
- LED Drivers
- PDP Smart Power Module (PDP-SPM™)

**SIGNAL PATH ICs**

**Amplifiers & Comparators**

- Audio Amplifiers
- Comparators
- Current Sense Amplifier
- High Performance Amplifiers (>15MHz)
- Operational Amplifiers

**Signal Conversion**

- Triple Video DACs
- Video Filter Drivers
- Video Switch Matrix/Multiplexers

**Interface**

- LVDS
- Serializer/Deserializer (µSerDes™)
- USB Transceiver

**Switches**

- Analog/Audio Switches
- Bus Switches
- USB Switches
- Video Switches

**LOGIC | TINYLOGIC®**

- Buffers, Drivers, Transceivers
- Flip flops, Latches, Registers
- Gates
- MSI Functions
- Multiplexer/Demultiplexer Encoders/Decoders
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- TinyLogic®
- Voltage Level Translators

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