



#### **ANALOG**

We still see capacity constraints, but prices remain stable for most of the analog product families. The delivery situation is slightly improving only at TI (still allocation on SLL). ST is on allocation for Op Amps and Voltage Regulators and Infineon is on allocation for TLE's. No improvement is expected during Q4/2010.

- Texas Instruments: Lead times are at 8-20 weeks; prices are stable.
- National Semiconductor: Lead times are at 12-16 weeks.
- ON Semiconductor: All linear families are at 15-20 weeks lead time; prices increased recently.
- STMicroelectronics: Allocation for analog; prices are stable.

Product Group	Supplier	L	ead Time	Price	Special Note
Analog Switches	VISHAY.	•	12-16 weeks	0	-
Data Converters	National Semiconductor	0	8-12 weeks	•	-
Data Converters	TEXAS INSTRUMENTS	0	8-12 weeks	O	-
Interface	National Semiconductor	0	6-8 weeks	•	-
Interface	Texas Instruments	•	18 weeks	•	-
Op Amps	National Semiconductor	0	4-16 weeks	•	-
Op Amps	TEXAS INSTRUMENTS	•	21 weeks	•	-
Op Amps	<b>57</b> //.	•	Allocation	•	-
Op Amps	ON Semiconductor®	•	17-20 weeks	0	-
Voltage Regulators	National Semiconductor	0	8-16 weeks	•	-
Voltage Regulators	<b>577.</b>	•	Allocation	•	-
Voltage Regulators	ON Semiconductor*	•	17-20 weeks	0	-

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### **DISCRETES**

There have been no major changes in the market. Prices and lead times are stable at a high level.

Product Group	Supplier	L	ead Time	Price	Special Note
Power MOSFETs	TEXAS INSTRUMENTS	•	8-12 weeks	•	-
Zener Diodes	NP	•	16-24 weeks	•	-
Zener Diodes	ON Semiconductor®	•	20-26 weeks	•	-
Zener Diodes	FAIRCHILD SEMICONDUCTOR*	•	20-24 weeks	•	-
Bi-polar Power/Thyristors	FAIRCHILD SEMICONDUCTOR*	•	20-28 weeks	•	-
Bi-polar Power/Thyristors	infineon	•	20-24 weeks	•	-
Bi-polar Power/Thyristors	NAP	•	16-20 weeks	•	-
Bi-polar Power/Thyristors	ON Semiconductor®	0	16-20 weeks	•	-
Bi-polar Power/Thyristors	<b></b>	0	20-24 weeks	•	-
IGBT	FAIRCHILD SEMICONDUCTOR*	•	24-30 weeks	•	-
IGBT	infineon	•	24-30 weeks	•	-
Power MOSFETs	FAIRCHILD SEMICONDUCTOR	•	30-50 weeks	•	-
Power MOSFETs	infineon	•	24-28 weeks	•	-
Power MOSFETs	<b></b>	•	20-30 weeks	•	-
Power MOSFETs	TOSHIBA	•	14-18 weeks	•	-
Power MOSFETs	VISHAY.	•	30-40 weeks	•	There is lower lead time for halogene free dev.
RF Devices	AVAGO TECHNOLOGIES	•	6-8 weeks	•	-
RF Devices	infineon	•	18-24 weeks	•	-
RF Devices	NP	•	14-16 weeks	•	-
RF Devices	VISHAY.	•	10-14 weeks	•	-
Rectifiers	FAIRCHILD SEMICONDUCTOR*	•	25-45 weeks	•	-
Rectifiers	infineon	•	16-20 weeks	•	-
Rectifiers	ON Semiconductor®	•	30-40 weeks	•	-
Rectifiers	<b></b>	•	20-30 weeks	•	-
Rectifiers	VISHAY.	•	20-30 weeks	•	-

**CONTINUATION** >>

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### >> DISCRETES (CONTINUATION)

Product Group	Supplier	L	ead Time	Price	Special Note
Sensors	Freescale <sup>™</sup>	•	10-16 weeks	•	-
Sensors	infineon	•	20-26 weeks	0	-
Sensors	NXP	•	8-10 weeks	•	-
Small Signal	FAIRCHILD SEMICONDUCTOR*	0	36-40 weeks	0	-
Small Signal	infineon	•	22-26 weeks	<b>•</b>	The most affected packages are: SOT23, SOT323, SOT363.
Small Signal	NXP	•	24-28 weeks	•	-
Small Signal	ON Semiconductor®	•	24-28 weeks	•	-
Small Signal	<b>\</b> \	•	24-30 weeks	•	-
Small Signal	VISHAY.	•	20-24 weeks	•	-
TVS/Protection	FAIRCHILD SEMICONDUCTOR*	•	20-26 weeks	•	-
TVS/Protection	NP	0	16-20 weeks	•	-
TVS/Protection	ON Semiconductor®	•	20-26 weeks	•	-
TVS/Protection	<b>577</b> .	•	14-16 weeks	0	-
TVS/Protection	VISHAY.	•	24-30 weeks	0	-
Zener Diodes	VISHAY.	•	16-18 weeks	0	-

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### **MEMORY**

Atmel still has severe problems for all kinds of flash memories. There are still delivery constraints with Numonyx/Micron.

Supplier	Product Group	L	ead Time	Price	Special Note
<u>AIMEL</u>	Flash (NOR)	•	Allocation	0	The AT29 and AT49 series go obsolete; LTB is until September 2010; the lead time is 52 weeks.
AIMEL.	EEprom	•	13-18 weeks	0	New die shrinks are going to come for 24CO2,C16,C32,C64, C512.
AMEL	Eprom	•	Allocation	0	-
CYPRESS	SRAM	•	10-20 weeks	•	We are offering and supporting synchronus and asynchronus SRAMs, Multiport SRAMs, parallel and serial NV-SRAMs and FIFOs.
ISSI	SDRAM	0	4-12 weeks	•	-
ISSI	DDR	•	4-12 weeks	•	-
ISSI	DDR2	•	4-12 weeks	•	-
ISSI	EEprom	00	12-16 weeks	•	This division is going to be sold to Giantec this year.
ISSI	SRAM	0	10-18 weeks	•	ISSI provides long-term availability for SRAMs. Great portfolio in synchronus SRAMs. New Lowpower 4 MB, 5 V, SOP samples and new PSEUDO SRAMs 32 MB and 64 MB samples are available.
ON Semiconductor®	EEprom	•	6-10 weeks	•	-
N numary: is now Microsi	Flash (NOR)	•	Allocation	•	-
Micron	Flash (NAND)	•	Allocation	•	-
SAMSUNG	Flash (NOR)	•	3-5 weeks	•	-
SAMSUNG	Flash (NAND)	0	4-8 weeks	0	-
SAMSUNG	SDRAM	0	4-8 weeks	0	-
SAMSUNG	DDR	0	4-8 weeks	0	-
SAMSUNG	DDR2	O	4-8 weeks	O	-
SAMSUNG	DDR3	O	4-8 weeks	O	-
SAMSUNG	SRAM	0	12-24 weeks	•	Some of the obsolete slow SRAMs are still available from our stock. Synchronus SRAMs are only based on NCNR committment!
SPANSION	Flash (NOR)	•	14-25 weeks	0	AL008J, AL032D, 064N, 128P, 256, 512 are still on tight supply.
	EEprom	0	26-36 weeks	0	-
<b></b>	Eprom	0	32 weeks	0	Ceramic package and 3.3 V OTP will be discontinued.

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### **OPTO**

Some of the Osram LEDs are still on allocation.

Product Group	Supplier	L	ead Time	Price	Special Note
Coupler	AVAGO	0	6-16 weeks	•	There is a tight supply for some Gate Drivers (i.e.J312, 316J). Lead times for Avago Photo-Tx Optocoupler have now increased to more than 15 weeks.
Coupler	FAIRCHILD SEMICONDUCTOR*	0	12-47 weeks	0	-
Coupler	TOSHIBA	•	14-28 weeks, up to allocation	0	Opto Couplers are on allocation. Mini Flat IC couplers (TLP112/TLP113/TLP114/TLP115/TLP116) will be replaced by new items in new SO6 package. (See PCN X36-2010-05)
Coupler	VISHAY.	0	6-28 weeks	•	SMD Coupler TCLTxxx and TCMTxxx are on allocation.
LED's	AVAGO	0	6-12 weeks	•	-
LED's	OSRAM Opto Semiconductors	•	8-16 weeks, allocation	•	Golden/Platinum Dragon, Dragon+, some TopLEDs, Power TopLEDs and Advanced Power TopLEDs, some SideLEDs and Ostar are on allocation.
LED's	TOSHIBA	•	12 weeks	•	-
LED's	VISHAY.	0	6-14 weeks, partially 20	0	There is a price increase on all products.
LED's	LUMINUS	0	8-16 weeks	•	4000 K products are postponed until 2011. SBR-160 and SBM-160 are on hold until further notice.
LED's	EVERLIGHT LIGHTING FOREVER	0	8-16 weeks	•	-
Infrared	FAIRCHILD SEMICONDUCTOR*	•	8-27 weeks	•	-
Infrared	OSRAM Opto Semiconductors	0	8-16 weeks	•	SFH4750/51 are on allocation.
Infrared	VISHAY.	•	5-17 weeks	<b>•</b>	-
Infrared	EVERLIGHT LIGHTING FOREVER	•	12 weeks	•	-
Fiber-Optic	AVAGO	•	6-12 weeks	•	-
Fiber-Optic	TOSHIBA	0	12-16 weeks	•	-

#### **DSP**

The supply from TI is still very constrained; a slight improvement is expected in Q4.

Product Group	Supplier	Lead Time		Lead Time		Price	Special Note
DSP	** freescale** semiconductor	•	4-18 weeks	•	-		
DSP	TEXAS INSTRUMENTS	•	6-31 weeks	•	-		

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### **PROGRAMMABLE LOGIC**

Altera supply is still very tight.

Product Group	Supplier	Lead Time		Lead Time		Price	Special Note
Program. Logic	ATERA.	•	4-28 weeks	•	Effective July 3rd, 2010, Altera reduced the price for Arria II GX devices. EP4CE10, EP4CE115, EP4CE15, EP4CE22, EP4CE30, EP4CE40, EP4CE55, EP4CE6, all packages, all speed grades, leaded and leadfree are on allocation.		
Program. Logic		0	Allocation	0	Atmel allocates the following affected parts: ATF1502AS, ATF1502ASL, ATF16V8B, ATF16V8BQL, ATF22V10C, ATF22V10CQZ, ATF1504AS, ATF1504ASL and ATF1508AS, ATF1508ASL.		
Program. Logic	TEXAS INSTRUMENTS	0	10-20 weeks	•	-		

#### **MCU**

The supply situation is still critical at most of our suppliers, and we are still in some allocation scenarios. Our outlook is that the situation will slightly improve over the next months.

Supplier	Product Group	L	ead Time	Price	Special Note
<b>AMEL</b>	AVR	00	Partial allocation	•	-
	ARM	00	Partial allocation	•	-
Freescale semiconductor	Coldfire	•	8-20 weeks	•	-
Freescale semiconductor	Power Architecture	•	4-22 weeks	•	-
Freescale*	8 Bit	0	8-34 weeks	•	-
** freescale	16 Bit	0	8-26 weeks	•	-
Freescale semiconductor	i.MX	•	8-16 weeks	•	-
FUĴÎTSU	MCUs	•	14-20 weeks	•	-
infineon	MCUs	•	14-30 weeks	•	-
NXP	ARM7/ARM9	•	10-26 weeks	0	-
NP	8 Bit	•	12-26 weeks	•	-
<b>577</b> .	Cortex	•	14-22 weeks	0	-
<b>577.</b>	8 Bit	•	14-22 weeks	•	-
<b>577</b> .	16 Bit	•	14-22 weeks	0	-
TEXAS INSTRUMENTS	MSP430	•	14-24 weeks	•	-
TEXAS INSTRUMENTS	Luminary	•	12-24 weeks	•	-

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#### **LOGIC**

There is still very tight supply across all suppliers, but we see slight improvements on lead times. Prices are expected to remain stable short-term, but we expect to see some decreases long-term. Availability is improving at TI whereas lead times are increasing again on some NXP families, especially on TSSOP 14,16 and 56 / SO 14,16 and 20 / SOT 353 and 363.

Product Group	Supplier	Lead Time		Price	Special Note
Standard Logic	FAIRCHILD SEMICONDUCTOR*	•	12-20 weeks	•	-
Standard Logic	NP	•	12-30 weeks	•	-
Standard Logic	ON Semiconductor <sup>9</sup>	<b>•</b>	12-20 weeks	•	-
Standard Logic	<b>△</b> ▼ <b>/</b> 。	•	12-24 weeks	•	-
Standard Logic	TEXAS INSTRUMENTS	O	8-24 weeks	•	-