

Rebound Electronics



Market Insight Q1/2021

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General Market Insight

- Demand Surges, Supply Tightens at U.S. Factories. The components shortage is due to the automotive industry, which grew more than expected in Q4 2020. Not only has this constrained manufacturing expansion; car companies are shutting down production which could hurt the overall economy.
- China Passes Americas And Japan In IC Capacity. China will have increase wafer capacity for memory by 95%, foundry by 47%, and analog by 29%.
- Chip boom forces TSMC to shuffle 1,000 engineers. Taiwan Semiconductor Manufacturing Corporation (TSMC) is planning to send more than 1,000 engineers to its facilities in Tainan's Southern Taiwan Science Park to assist in boosted production.
- Executive Order Clears Path to \$37 Billion Chip Investment. President Biden signed, as expected, an executive order that paves the way for allocation of \$37 billion federal government investment to address the chip supply shortfall.
- TSMC, UMC use water tankers in Taiwan drought. Foundries TSMC and United Microelectronics are using industrial water tankers to bring in additional water for their wafer fabs to address a drought on the island.
- The widespread semiconductor shortages, in addition to increased demand, has led GlobalFoundries to invest \$1.4 billion USD in order to increase production at three of its manufacturing facilities located in Germany, Singapore and the US. This investment will allow the company to expand output through 2022 for products ranging from 12 to 90nm.
- MLCC lead times have stretched from 6-8 weeks to 16-20 weeks because of amplified demand and raw material shortages.



Abracon

- ABS06 / ABS07 series is facing wafer shortage and production full capacity. Lead times may stretch longer depending on market situation. AB06 series has estimated minimum lead time of 26-29 weeks while ABS07 series is on 48-51 weeks.



Altera

- Altera announced that Arria GX, Stratix II, Stratix II GX, MAX 7000 A, MAX II (including G/Z) will be made obsolete without replacement due to low volumes and declining demand LTB start June 4th 2021.



Amphenol

- AIPG lead time increases by 4 weeks for China plants due to shortened length of working time of its operators last January and tighter Covid-19 prevention. China factories and raw material suppliers are facing manpower shortage during this period.



Analog Devices

- ADI advised price increase on its vintage products for short term and long term supply assurance. Existing customer orders shipped on or March 28, 2021 will be invoiced at the present price while orders shipped on or after March 28 will be invoiced at the new price.



APTIV

- Due to increased demand in China and localized parts are under allocation, APTIV Shanghai Plant is having capacity issue. Overseas parts from Europe and USA/MX to Shanghai increased 2-4 weeks due to logistic delayed affected by Covid.



AVX

- Transfer of AVX operations to the AVX El Salvador last 2019 and the factory lockdown in end Q2 2020, has impacted the lead time of Tantalum MNO2 and Conformal to as long as 45 weeks. Lead times are expected to stabilize in Q2 2021 as AVX gradually catches up but increase in market demand this year may also have an impact. It is strongly recommended to use alternatives at this time.



Bourns

- Bourns Acquires Kaschke Components California based Bourns, a provider of automotive electronic components, recently announced that it has acquired German magnetic components manufacturer Kaschke. Through a new subsidiary, Bourns acquired all shares and interests in Kaschke Group, including its headquarters in Göttingen, Germany.



Cirrus Logic

- Sharp increase in demand due to AKM factory fire. As such LT increases 20 20+ weeks and price increases in the market.



C&K

- Tact switch production in Dole-France are impacted due to Covid.
- Capacity in Dole factory is 75% to full for most lines and is expected to improve from March to May period.



Infineon

- Small signal transistors and diodes on EOL. Infineon extended last time buy to December 31, 2023.



Intel

- Intel has given the last product discontinuance order date for its 300 series desktop chipsets as July 23, 2021. Those included in this notice are: **GL82Z370 SR3MD MM# 959538, FH82H370 SR405 MM# 964247, FH82Z390 SR406 MM# 964256, FH82B360 SR408 MM# 964265, GL82H310C SRCXT MM# 978315, GL82B365 SREVJ MM# 985926, and FH82H310D SRFE1 MM# 999DZN.**



ISSI

- 10% price increase across the board



Kemet

- Extended lead times on Tantalum Polymer due to increase in demand in Asia affecting all suppliers to some degree. Expect lead time to be in 26-30 week range before end of Q2 2021. It is advisable to use alternatives such as Vishay, AVX, Panasonic healthy inventory and competitive pricing at this time.
- Kemet will also have price adjustments on specific product lines:

Aluminum Polymer H-Chip	A700, A720
Supercapacitors	All Series
Tantalum Polymer H-Chip	T520, T521, T525, T528, T529, T530, T540, T541, T543
Tantalum MNO2 H-Chip	T489, T490, T491, T494, T495, T496, T498, T499, T510
Tantalum MNO2 Through-Hole	T110, T140, T212, T322, T340, T35x, T39x
Tantalum Polymer Through-Hole	All Series



Littelfuse

- Price increase noticed with immediate effect. Littelfuse will increase due to increases in raw material, manufacturing, and more recently, significantly higher freight cost.
- Specific increase on cost of making gold plated fuses, pricing on its 0451/0452 series also increased.



Maxim Integrated

- Increase in pricing and standard lead time to 16-18 weeks while some parts have extended to 25 weeks.
- A number of debits will be cancelled this year after ADI acquired Maxim.



Melexis

- Melexis is also introducing a strict allocation mode with rules regarding the delivery dates, quantities, and lead times.



Microchip

- Microchip has introduced their Preferred Supply Program (PSP) and offer the option to receive prioritized capacity in the second half of 2021 and the first half of 2022 The preferred Supply Program has the following elements:
 - 12 months of continuous, non cancellable and non reschedulable backlog
 - Capacity priority will be for the second 6 months of the next 12 month period not the first 6 months While not a guarantee of supply they will most certainly place their highest priority on those that work within this program.
 - Capacity priority allocation will be made on a first come, first served basis until the available capacity is allocated which they expect is likely to happen by the end of February



Micron

- V 00 H, 256 x 16 IT Grade (MT 41 K 256 M 16 TW 107 IT P) is extremely tight in the market.



Molex

- SSB6 on capacity issue due to increase demand from mobile customers VIVO, OPPO and Xiaomi. Delivery on expedite mode with Molex via air to shorten delivery time.



INNOVATOR IN ELECTRONICS

Murata

- Murata has notified customers of extended lead times of between 16-24 weeks and it is anticipated that it will have constrained supply for the rest of the year.



Nexperia

- Nexperia announces increase in R&D and global production spending. Chiefly, the company plans to boost production efficiency with new 200 mm technologies at its wafer fabs in Hamburg, Germany, and Manchester, England. The Hamburg site will receive new wide bandgap semiconductor manufacturing capabilities. Further, Nexperia will improve its test and assembly capabilities at its factories in China, Malaysia and the Philippines. These efforts will also include implementing advanced automation and system in package capabilities. On the R&D side, Nexperia will invest 9 of its total sales into new product development across its R&D sites in Malaysia, China, Hong Kong, Germany and the UK.



NXP

- NXP pressure and motion sensors are facing capacity constraints due to a strong increase in demand. It is recommended to place long term backlog as further increase of lead time is expected.
- NXP distributors specified that 2000 of its products with increase pricing belong to automotive applications alone. As a result, current lead times for its automotive related series range from 30-50 weeks. Supply is not expected to improve in Q12021 but may bounce back in Q2 given there are no further issues with wafer allocations. In addition, due to MCU shortage, **NXP's MC56F8, MC9S08, MCF5, MCIMX6, FS32K and SPC56 series** are being affected.



ON Semiconductor

On Semiconductor

- On Semiconductor will be cancelling specific backlog that significantly exceeds historical run rates and typical inventory levels. They will also extend the non-changeable non-cancellable order process through October 2021 for a targeted set of devices. On Semiconductor will start to provide a list of impacted backlog as well as devices that will be non-changeable and non-cancellable order processing which will be enforced as of March 5th, 2021.



Panasonic

Panasonic

- Full capacity for Power Relay/HE series and on allocation



RENESAS

Renesas

- Renesas Electronics Corp of Japan has agreed to acquire Apple Inc. supplier Dialog Semiconductor PLC, the latest UK based chipmaker being sold to Asian investors Dialog accepted the all cash offer of about €4.9 billion (5.9 billion 620 billion), at €67.50 per share.
- Renesas is planning to invest 15 billion JYP this quarter into facilities so it can increase in house production of automotive semiconductors.



SAMSUNG

Samsung

- MLCC price might increase at anytime due to unbalance of supply and demand. Rising rate is about 15%~20%, high capacitance MLCC ($\geq 1\mu\text{H}$) and 0.1 μF MLCC are possible to be affected.



SILICON LABS

Silicon Labs

- Increase in pricing and lead times are dramatically extending around 16-22 weeks.



STMicroelectronics

- Due to MCU shortage, extended standard lead times are growing to 30+ weeks across the board. STMIC's 32-bit MCUs (ST 32 series), for example, have experienced longer lead time since Q3 2020.



Takbro

- Price increase on copper products and cable ties started as of March 1, 2021.



Taiyo Yuden

- Taiyo Yuden notified its customers to extend the delivery period to 1 month and if possible, plan for next 6 months, highlighting the shortage of supply. Lead times are between 16 -24 weeks and it is anticipated that it will have constrained supply for the rest of the year.



TDK

- MLCC price might increase at anytime due to unbalance of supply and demand. Rising rate is about 15%~20%, high capacitance MLCC ($\geq 1\mu\text{H}$) and 0.1 μF MLCC are possible to be affected.



TE Connectivity

- MQS, Automotive connectors lead time increase and on allocation due to increase in global demand.
- Cable Mgmt for ADM wire lead time increase due to Covid in UK affecting production and logistic.
- Multigigs, back plane lead time increase and on allocation due to increase demand in China.



U-blox

- U-blox products modules with several contract manufacturers in Austria, in the Philippines, in Taiwan, and in Japan. Certain modules are currently on an extended lead time of 16 weeks following the AKM factory fire in Japan and are also on general component shortage. AKM manufactures components used in TCXO's which are on board of some U-blox GNSS and cellular modules. Due to this severe disruptions, lead times on the affected products are still not expected to be back to normal 8 weeks for several months.



Vishay

- Vishay issued new prices last February 5, 2021 on its semiconductor portfolio.
- Vishay TNPW 0402/0603 lead times extended by 12 weeks due to larger volume orders and internal reallocation of manufacturing lines.



Wago

- Cost increases announced and will be reflected in their new cost book in March.



Walsin

- MLCC price might increase at anytime due to unbalance of supply and demand. Rising rate is about 15%~20%, high capacitance MLCC ($\geq 1\mu\text{H}$) and 0.1 μF MLCC are possible to be affected. Walsin has a clear order visibility to 4 months and some customers have started placing order for Q3.



Yageo

- Price to increase by 15%~25% on its resistor beginning March. Stock price remains high at this time since most of the agents and distributors have only limited resistor stock. MLCC price increases very likely.



ANALOG		PRICING TREND	LEAD TIME TREND	LEAD TIME (WEEKS)
Standard	Amplifiers & Comparators	↑	→	12-18
	Analog Interface	↑	→	12-18
	Power Management	↑	→	12-18
	Converters	↑	→	12-18

MPU/MCU		PRICING TREND	LEAD TIME TREND	LEAD TIME (WEEKS)
MPU		↑	↑	28+
MCU	8 Bit & Lower	↑	↑	28+
	16 Bit	↑	↑	28+
	32 Bit & Higher	↑	↑	28+
DSP		↑	↑	18+

PROGRAMMABLE LOGIC	PRICING TREND	LEAD TIME TREND	LEAD TIME (WEEKS)
	→	↑	18+

STANDARD LOGIC	PRICING TREND	LEAD TIME TREND	LEAD TIME (WEEKS)
Timing Products	↑	↑	18+
Interface	↑	↑	18+
Connectivity	↑	↑	18+
Standard Logic	↑	↑	12-18

POWER	PRICING TREND	LEAD TIME TREND	LEAD TIME (WEEKS)
FET	↑	↑	28+
IGBT	↑	↑	18+
Rectifier	↑	↑	18+
Other Power	↑	↑	18+



MEMORY	PRICING TREND	LEAD TIME TREND	LEAD TIME (WEEKS)
Flash	↑	↑	18+
eMMC	↑	↑	18+
EEPROM	→	↑	18+
DRAM	↑	↑	18+
SRAM	↑	→	12-18
Solid State Drives	↑	↑	18+

SENSORS	PRICING TREND	LEAD TIME TREND	LEAD TIME (WEEKS)
	↑	↑	28+

OPTO	PRICING TREND	LEAD TIME TREND	LEAD TIME (WEEKS)
LEDs (Low Power)	→	→	4-10
LEDs (Mid Power)	→	→	4-10
LEDs (High Power)	→	↑	12-18
Couplers	↑	↑	18+
Fibre-Optic	↑	↑	18+
Infrared	↑	↑	18+
Other Opto	↑	↑	12-18

DISCRETE	PRICING TREND	LEAD TIME TREND	LEAD TIME (WEEKS)
Small Signal	↑	↑	18+
RF	↑	↑	18+



↔	Stable
↗	Increasing
↘	Decreasing
SMA	Selective Market Adjustment
EOL	End-of-Life

click on a category below:

Analog	High- End
Battery	Interconnect
Connectivity	Opto / Lighting
Discrete	Memory
Electromechanical	Passives

Analog

MANUFACTURER	PRODUCT	LEAD TIME (WEEKS)	TREND	PRICING	COMMENTS
AMS	Analog	10-32	↔	↗	
BOSCH	Sensors	16-18	↔	↔	
	Multi- Source Analog/Power	14-16	↗	↔	
DIODES	Switching Regulators	14-16	↗	↔	
	Timings	16-18	↗	↗	
FTDI Chip	Interface	20-32	↗	↗	
	Sensors	10-42	↔	↗	
Infineon	Switching Regulators	28+	↗	↗	
	Analog and Power for Automotive (CAN/LIN/Smart FET)	24-26	↔	↔	
	Signal Chain Amplifiers	8-10	↔	↔	
Maxim Integrated	Interface	8-10	↔	↔	
	Sensors	8-20	↗	↔	
Maxlinear	Interface	18-42	↗	↗	
Melexis	Sensors	18-48	↔	↔	
	Signal Chain (Amplifiers and Data Converters)	14-16	↗	↗	
Microchip	Timing	14	↗	↗	
	Switching Regulators	10-16	↔	↗	
MPS	Switching Regulators	16-18	↔	↔	



MANUFACTURER	PRODUCT	LEAD TIME (WEEKS)	TREND	PRICING	COMMENTS
NXP	Sensors	18-34	↔	↗	
	Interface	18-22	↗	↗	
	Analog and Power for Automotive (CAN/LIN/Smart FET)	22-28	↗	↗	
Omron	Sensors	20	↗	↔	
ON Semiconductor	Sensors	20-54	↗	↗	
	Signal Chain (Amplifiers and Data Converters)	18-26	↗	↔	
	Timing	16-18	↗	↗	
	Multi- Source Analog/Power	16-38	↗	↗	
	Switching Regulators	16-24	↗	↗	
Panasonic	Sensors	16-20	↗	↔	
3PEAK	Signal Chain (Amplifiers and Data Converters)	14-18	↘	↔	
Renesas	Signal Chain (Amplifiers and Data Converters)	18-20	↔	↔	
	Timing	22	↔	↗	
	Interface	18-20	↔	↔	
	Switching Regulators	18-20	↔	↗	
	ROHM	Sensors	14-26	↔	↔
Switching Regulators		10-22	↔	↔	
ST Microelectronics	Sensors	22-26	↗	↗	
	Signal Chain (Amplifiers and Data Converters)	18-22	↗	↗	
	Multi- Source Analog/Power	14-22	↗	↗	
	Switching Regulators	14-28	↗	↗	
	Analog and Power for Automotive (CAN/LIN/Smart FET)	28-32	↗	↗	
TE Sensor Solutions	Sensors	18-32	↔	↔	
Vishay	Sensors	16-22	↔	↔	



Batteries

MANUFACTURER	PRODUCT	LEAD TIME (WEEKS)	TREND	PRICING	COMMENTS
Energizer	Alkaline	10-12	↔	↔	
	Lithium Metal	10-12	↔	↔	
	Silver Oxide	10-12	↔	↔	
GP Batteries	Alkaline	10-12	↔	↔	
	Lithium Metal	12-14	↔	↔	
	Lithium Ion	12-14	↔	↔	
	Nickle Metal Hydride	12-14	↔	↔	
	Lead Acid	10-12	↔	↔	
	Carbon Zinc	10-12	↔	↔	
Panasonic	Alkaline	12-14	↔	↔	
	Lithium Metal	22-24	↙	↔	
	Nickle Metal Hydride	10-12	↔	↔	
	Lead Acid	14-16	↔	↗	
	Carbon Zinc	10-12	↔	↔	
Renata Batteries	Lithium Metal	14-16	↔	↔	
	Nickle Metal Hydride	12-14	↔	↔	
	Silver Oxide	10-12	↔	↔	
	Carbon Zinc	10-12	↔	↔	
VARTA	Alkaline	12-14	↔	↔	
	Lithium Metal	20-26	↔	↗	
	Lithium Ion	34-40	↔	↔	
	Nickle Metal Hydride	12-14	↔	↔	



Connectivity

MANUFACTURER	PRODUCT	LEAD TIME (WEEKS)	TREND	PRICING	COMMENTS
AMS	RFID	30-32	↗	↔	
AVX	Antennas	10-12	↔	↔	
	802.15.4/Zigbee Modules	16-18	↔	↔	
CEL	Small Signal, Schottky Diodes, PIN Diodes, Bipolar Transistors, FETs/PHEMTs, Amplifiers, Mixers & Modulators, VCOs, SS Bipolar Transistors, Wideband Transistors	20-22	↔	↔	
Cypress	Bluetooth Modules	28-32	↗	↗	Cypress is now Infineon
	Wi-Fi Modules	22-24	↗	↔	
Laird Connectivity	Antennas	18-22	↗	↗	
	Cellular Modules	8-12	↔	↔	
Linx Technologies	Antennas	8-10	↔	↔	
	Transceivers/Receivers	8-10	↔	↔	
	Transceivers/Receivers	18	↔	↔	
Melexis	RFID	16-18	↔	↔	
	Wi-Fi Modules	26-28	↗	↗	
Microchip	Bluetooth Modules	26-28	↗	↗	
	Transceivers/Receivers	20-22	↔	↗	
	Wi-Fi Modules	28-32	↗	↔	
Murata	Bluetooth Modules	28-32	↗	↔	



MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
NXP	Multi-Protocol/Chip Solutions	8	↗	↗	
	Transceivers/Receivers	26	↔	↗	
	RFID	12-14	↔	↗	
	High Power IC's	20	↔	↗	
ON Semiconductor	Bluetooth Modules	18-32	↗	↗	
Panasonic	Bluetooth Modules	18-20	↗	↔	
	RFID	16-18	↔	↔	
Pulse Electronics	Antennas	10-12	↔	↔	
Sierra Wireless	Multi-Protocol/Chip Solutions	26-28	↗	↔	
	Cellular Modules	22+	↗	↔	Certain devices are affected by AKM. LT's undetermined
Silex Technology	Wi-Fi Modules	26-30	↗	↗	
ST Microelectronics	Bluetooth Modules	22-28	↗	↗	
	RFID	10-12	↔	↗	
Taoglas	Antennas	10-12	↔	↔	
U-Blox	Bluetooth Modules	28-30	↗	↗	
	Cellular Modules	28-32	↗	↗	Certain devices are affected by AKM. LT's undetermined
	GPS	28-32	↗	↗	Increase in pricing on some GPS modules



Discrete

MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
AVX	Varistors	16-20	↔	↔	
CEL	Optocoupler Components	22	↔	↔	
Diodes Inc.	Low Voltage MOSFETS	20-28	↗	↗	
	TVS Diodes	20-22	↗	↔	
	Bridge Rectifiers	18-20	↔	↗	
	Schottky Diodes	14-22	↗	↔	
	Rectifiers	12-20	↔	↗	
	Switching Diodes	14-28	↔	↔	
	Small Signal MOSFETS	14-22	↗	↔	
	Zener Diodes	14-32	↗	↔	
	Bipolar Transistors	14-22	↗	↔	
	Digital Transistors	14-22	↗	↔	
	General Purpose Transistors	14-32	↗	↔	
	Logic	14-18	↔	↗	
	EATON	ESD	14-16	↔	↔
Fuses		12-16	↔	SMA	
Clips and Holders		14-18	↔	↔	
Everlight	Optocoupler Components	26	↗	↗	
	Low Voltage MOSFETS	24-46	↗	↗	
	High Voltage MOSFETS	26-38	↗	↗	
	IGBTs	24-34	↗	↗	
	Bridge Rectifiers	16-22	↗	↗	
	Schottky Diodes	14-42	↗	↗	
Fairchild (ON Semiconductor)	Rectifiers	12-16	↗	↗	
	Switching Diodes	14-42	↗	↗	
	Small Signal MOSFETS	14-42	↗	↗	
	Zener Diodes	14-42	↗	↗	
	Bipolar Transistors	14-42	↗	↗	
	Optocoupler Components	32-52	↗	↗	
Hollyfuse	Fuses	16	↗	↔	



MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
AVX	Varistors	16-20	↔	↔	
CEL	Optocoupler Components	22	↔	↔	
Diodes Inc.	Low Voltage MOSFETS	20-28	↗	↗	
	TVS Diodes	20-22	↗	↔	
	Bridge Rectifiers	18-20	↔	↗	
	Schottky Diodes	14-22	↗	↔	
	Rectifiers	12-20	↔	↗	
	Switching Diodes	14-28	↔	↔	
	Small Signal MOSFETS	14-22	↗	↔	
	Zener Diodes	14-32	↗	↔	
	Bipolar Transistors	14-22	↗	↔	
	Digital Transistors	14-22	↗	↔	
	General Purpose Transistors	14-32	↗	↔	
	Logic	14-18	↔	↗	
		ESD	14-16	↔	↔
EATON	Fuses	12-16	↔	SMA	
	Clips and Holders	14-18	↔	↔	
Everlight	Optocoupler Components	26	↗	↗	
Fairchild (ON Semiconductor)	Low Voltage MOSFETS	24-46	↗	↗	
	High Voltage MOSFETS	26-38	↗	↗	
	IGBTs	24-34	↗	↗	
	Bridge Rectifiers	16-22	↗	↗	
	Schottky Diodes	14-42	↗	↗	
	Rectifiers	12-16	↗	↗	
	Switching Diodes	14-42	↗	↗	
	Small Signal MOSFETS	14-42	↗	↗	
	Zener Diodes	14-42	↗	↗	
	Bipolar Transistors	14-42	↗	↗	
	Optocoupler Components	32-52	↗	↗	
Hollyfuse	Fuses	16	↗	↔	



MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
Microsemi	High Voltage MOSFETS	32	↗	↗	
	IGBTs	28-34	↗	↗	
	Mil-Aero Diodes	32-58	↗	↗	
	Mil-Aero Transistors	32-62	↗	↗	
Nexperia	Low Voltage MOSFETS	20-32	↗	↔	
	ESD	8-16	↗	SMA	
	Schottky Diodes	14-22	↗	↗	
	Switching Diodes	14-22	↗	↗	
	Small Signal MOSFETS	14-32	↗	↗	
	Zener Diodes	14-22	↗	↗	
	Bipolar Transistors	14-32	↗	↗	
	Digital Transistors	14-22	↗	↗	
	General Purpose Transistors	14-32	↗	↗	
	Logic	22	↗	↗	
ON Semiconductor	Low Voltage MOSFETS	24-46	↗	↗	
	ESD	14-42	↗	↗	
	Wide Bandgap MOSFETS	26-36	↗	↗	
	Schottky Diodes	14-42	↗	↗	
	Rectifiers	12-42	↗	↗	
	Switching Diodes	14-42	↗	↗	
	Small Signal MOSFETS	14-42	↗	↗	
	Zener Diodes	14-42	↗	↗	
	Bipolar Transistors	14-42	↗	↗	
	Digital Transistors	14-42	↗	↗	
	General Purpose Transistors	14-42	↗	↗	
Logic	32-52	↗	↗		
ProTek Devices	Diode Arrays	14-18	↔	↔	
Renesas	Optocoupler Components	24	↗	↔	
ROHM	High Voltage MOSFETS	22-28	↗	↔	
	Wide Bandgap MOSFETS	22-28	↗	↗	
	Schottky Diodes	14-42	↗	↔	
	Switching Diodes	14-42	↗	↔	
	Digital Transistors	14-42	↗	↔	
	General Purpose Transistors	14-42	↗	↔	



MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
Schurter	Fuses	14-22	↔	↔	
	Clips and Holders	14-28	↗	↔	
Semtech	Diode Arrays	10-14	↔	↔	
	Mil-Aero Diodes	22-48	↗	↔	
ST Microelectronics	Low Voltage MOSFETS	24-28	↗	↗	
	High Voltage MOSFETS	24-30	↗	↔	
	IGBTs	24-30	↗	↗	
	ESD	16-32	↗	↗	
	Wide Bandgap Mosfets	32-42	↗	↗	
	Thyristors/Triacs	18-22	↗	↗	
	TVS Diodes	16-22	↗	↗	
	Rectifiers	12-28	↔	↗	
	Bipolar Transistors	14-32	↗	↗	
	Taiwan Semiconductor	Low Voltage MOSFETS	24-46	↗	↗
ESD		14-42	↗	↗	
Wide Bandgap Mosfets		26-36	↗	↗	
Schottky Diodes		14-42	↗	↗	
Rectifiers		12-42	↗	↗	
Switching Diodes		14-42	↗	↗	
Small Signal MOSFETS		14-42	↗	↗	
Zener Diodes		14-42	↗	↗	
Bipolar Transistors		14-42	↗	↗	
Digital Transistors		14-42	↗	↗	
TDK EPCOS	General Purpose Transistors	14-42	↗	↗	
	Logic	32-52	↗	↗	
TDK EPCOS	Varistors	20-24	↔	↔	
TE Connectivity	PTC Fuses	14-18	↗	↗	
Vishay	Low Voltage MOSFETS	18-24	↗	↗	
	High Voltage MOSFETS	18-26	↗	↗	
	TVS Diodes	30-32	↗	↗	
	Bridge Rectifiers	16-42	↗	↗	
	Rectifiers	14-44	↗	↗	
	Zener Diodes	14-32	↗	↗	
	Optocoupler Components	24	↗	↗	



Electromechanical

MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
AVX	Timing	14-16	↔	↔	
Aavid	Fans	14-16	↔	↔	
	Heatsinks	14-16	↔	↗	
Abracon	Timing	14-42	↗	SMA	
ADDA	Fans	16-18	↔	↔	
Alps Electric	Switches	14-26	↗	↔	
American Zettler	Relays	14-28	↔	↔	
Bivar	Hardware	8-10	↔	↔	
C&K	Switches	14-22	↗	↔	
Citizen Finedevice	Timing	14-32	↗	↔	
COSEL	Power Supplies (AC/DC)	14-22	↔	↔	
	Power Supplies (DC/DC)	14-18	↔	↔	
CTS	Switches	10-12	↔	↔	
	Timing	10-12	↔	↔	
CUI Inc	Power Supplies (AC/DC)	14-16	↗	↔	
	Power Supplies (DC/DC)	14-16	↔	↔	
	Heatsinks	12-14	↔	↔	
Delta	Fans	20-22	↔	↔	
Diodes Inc	Timing	10-12	↔	↔	



MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
E-Switch	Switches	12-14	↔	↔	
EPSON Electronics America	Timing	12-30	↗	SMA	
Fox	Timing	12-28	↗	SMA	
Grayhill	Switches	18-20	↗	↔	
Heyco	Hardware	8-10	↔	↔	
Hongfa	Relays	16-42	↗	↔	
Infineon	Relays	20-24	↔	↔	
IXYS	Relays	10-22	↗	↔	
Keystone	Hardware	6-8	↔	↔	
Kyocera International	Timing	14-16	↔	SMA	
Meanwell	Power Supplies (AC/DC)	16-18	↗	↔	
Mornsun	Power Supplies (AC/DC)	10	↗	↔	
	Power Supplies (DC/DC)	10	↗	↔	
Murata	Timing	10-12	↔	↔	
Murata Power Solutions	Power Supplies (AC/DC)	14-22	↗	↔	
	Power Supplies (DC/DC)	14-16	↗	↔	



MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
Myrra	Power Supplies (AC/DC)	18	↔	↙	New pricing on PSU
NKK Switches	Switches	12-20	↔	↗	
NMB	Fans	16-18	↗	↔	
Ohmite	Fans	12-14	↗	↗	
Omron	Relays	30	↗	↔	
	Switches	24	↗	↔	
Panasonic	Relays	16-38	↔	↔	
	Switches	12-14	↔	↔	
Qualtek	Fans	16-28	↔	↔	
Ralton	Timing	12-18	↔	↔	
RECOM	Power Supplies (AC/DC)	14-20	↔	↔	
	Power Supplies (DC/DC)	14-20	↔	↔	
Schneider Electric	Relays	16-18	↔	↔	
Song Chuan	Relays	26-28	↔	↔	
SUNON	Fans	18-20	↔	↔	
TE Sensor Solutions	Relays	14-16	↔	↔	
	Switches	12-14	↔	↔	
Vicor	Power Supplies (AC/DC)	22-24	↔	↔	
	Power Supplies (DC/DC)	22-24	↔	↔	



High-End

MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
Compulab	SOM	22	↗	↗	
	8 bit MCU	28-30	↗	↔	
	32 bit MCU	24-30	↗	↔	
Cypress	USB	22-30	↗	↗	
	Automotive	22-26	↔	↔	
DKE	E-paper Display	30	↗	↗	
Formerica	Fibre Optic Transceivers	10-14	↗	↔	
Infineon	Automotive	34	↔	↔	
Lattice Semiconductor	FPGA	22-38	↗	↗	
	8 bit MCU	18-40	↗	↗	
	32 bit MCU	18-40	↗	↗	
Microchip	PHY/ Ethernet	26-38	↗	↗	
	USB	18-26	↗	↗	
	32 bit MPU	14	↔	↗	
Microsemi	FPGA	20-36	↗	↗	
	PHY/ Ethernet	20-36	↗	↗	
	8 bit MCU	28	↗	↗	
	32 bit MCU	18-28	↗	↔	
NXP	Automotive	Allocation	↗	↗	
	32 bit MPU	24-42	↗	↗	
	Network Processors	18-28	↗	↗	
Raystar	LCDs	16	↗	↗	
	8 bit MCU	14-18	↙	↗	
	32 bit MCU	14-18	↙	↔	
Renesas	Automotive	32	↔	↔	
	32 bit MPU	26	↔	↗	
Renesas Synergy	32 bit MCU	14-16	↔	SMA	
Sharp	LCDs	22-26	↗	↗	
	8 bit MCU	Allocation	↗	↗	
	Automotive	Allocation	↗	↗	
	32 bit MPU	22	↔	↗	
ST Microelectronics	STM32F0- 32 bit MCU	Allocation	↔	↗	
	STM32F1- 32 bit MCU	Allocation	↔	↗	
	STM32L- 32 bit MCU	28	↗	↗	
Zilog	8 bit MCU	22-28	↔	↔	



Interconnect

MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
Adam Tech	D-Sub Connectors	14-16	↔	↗	
	PCB Connectors	14-16	↔	↗	
Altech Corp.	Terminal Blocks & Crimps	8-10	↔	↗	
	D-Sub Connectors	10-12	↔	↗	
Amphenol ICC	Data & Telecom	10-12	↔	↔	
	PCB Connectors	10-12	↔	↗	
	FFC/FPC	10-12	↔	↗	
Amphenol Sine System	Circular Connectors	14	↔	↔	
AVX	Lighting Connectors	12-14	↔	↔	
Connfly	PCB Connectors	16	↗	↔	
Degson	Terminal Blocks & Crimps	18	↔	↗	
EDAC	PCB Connectors	12-16	↔	↔	
Greenconn Technology	PCB Connectors	8-10	↔	SMA	



MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
HALO Electronics	Data & Telecom	18-20	↔	↔	
HARTING	PCB Connectors	10-12	↔	↗	
	PCB Connectors	10-14	↔	↗	
Hirose Electric	RF Connectors	12-14	↔	↗	
	FFC/FPC	12-14	↔	↗	
JST	PCB Connectors	24	↗	↔	
Mil-Max	PCB Connectors	6-8	↔	↗	
	IC Sockets	6-8	↔	↗	
Omron	PCB Connectors	18	↗	↔	
Sullins	PCB Connectors	8-10	↔	↔	
	Automotive Connectors	18-22	↗	SMA	
	Circular Connectors	22	↔	↗	
	Relays	42	↙	↔	
	D-Sub Connectors	10-12	↗	↗	
TE Connectivity	Data & Telecom	10-12	↗	↗	Ongoing capacity issues due to increase demand and Mexico Plant closures caused by COVID19
	PCB Connectors	18-20	↗	↗	
	RF Connectors	14-26	↗	↗	
	IC Sockets	8-10	↔	↗	
	Terminal Blocks & Crimps	16-18	↗	↗	
	Lighting Connectors	10-12	↔	↗	
WAGO	Terminal Blocks & Crimps	10-12	↔	↔	
	Lighting Connectors	10-12	↔	↔	
WECO	Terminal Blocks & Crimps	10-12	↔	↔	



Opto/Lighting

MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
Bridgelux	Chip On Board (CoB)	8-10	↔	↔	
Dialight	Indication LEDs	12-18	↗	↔	
Everlight	Automotive LEDs (AEC-Q101 Certified)	10-12	↔	↔	
	Infrared Components/ LED	10-12	↔	↔	
	Indication LEDs	10-12	↗	↔	
	UV LEDs	10-12	↔	↔	
Excellence Optoelectronics Inc.	Automotive LEDs (AEC-Q101 Certified)	8-10	↔	↔	
General Luminaire	Standard Light Engines (Level 2 Boards)	14-16	↗	↔	
Inolux	Indication LEDs	8-10	↔	↔	
Kingbright	LED Displays	12-14	↙	↔	
	Indication LEDs	10-12	↙	↔	
Lite-On	Infrared Components/ LED	14-16	↗	↔	
	LED Displays	10-12	↔	↔	
	Indication LEDs	18-22	↗	↔	
Lumex	LED Displays	14	↗	↔	
	Indication LEDs	10-16	↔	↔	
Lumileds	Illumination High Power LEDs (White)	12-14	↔	SMA	
	Illumination High Power LEDs (Colors)	12-14	↔	↔	
	Illumination High Power LEDs (White & Colors)	10-12	↔	↔	
	Horitcultural Mid Power LEDs (White & Colors)	8-10	↔	↔	
	Automotive LEDs (AEC-Q101 Certified)	16-18	↗	↗	
	Chip On Board (CoB)	12-14	↔	↔	
	Standard Light Engines (Level 2 Boards)	14-16	↗	↔	
	Infrared Components/ LED	10-12	↔	↔	
UV LEDs	10-12	↔	↔		
Meanwell	LED Drivers	6-8	↔	↔	
Murata	Lighting Controls	18-20	↔	↔	



MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
Nichia	Illumination High Power LEDs (White)	8-10	↔	↔	
	Illumination High Power LEDs (Colors)	8-10	↔	↔	
	Illumination High Power LEDs (White & Colors)	8-10	↔	↔	
	Horitcultural Mid Power LEDs (White & Colors)	6-8	↔	↔	
	Chip On Board (CoB)	8-10	↔	↔	
Raystar	OLEDs	18	↗	↗	
	TFT Displays	16	↗	↗	
ROHM	Infrared Components/ LED	8-10	↔	↔	
	Indication LEDs	12-14	↔	↔	
Samsung LED	Illumination High Power LEDs (White)	10-12	↔	↔	
	Illumination High Power LEDs (White & Colors)	8-22	↗	SMA	
	Horitcultural Mid Power LEDs (White & Colors)	20-24	↗	↗	
	Chip On Board (CoB)	8-10	↔	↔	
	Standard Light Engines (Level 2 Boards)	10-12	↔	↔	
Seoul Semiconductor	Illumination High Power LEDs (White)	10-12	↔	↔	
	Illumination High Power LEDs (White & Colors)	8-10	↔	↔	
	Horitcultural Mid Power LEDs (White & Colors)	8-10	↔	↔	
	Chip On Board (CoB)	8-10	↔	↔	
	Standard Light Engines (Level 2 Boards)	10-12	↔	↔	
Seoul Viosys	UV LEDs	10-12	↗	↔	
Stanley Electric	LED Displays	14	↔	↔	
	Indication LEDs	12-14	↔	↔	
SunLed	LED Displays	12	↔	↔	
Team Source	TFT Displays	16	↗	↗	
TT Electronics- Optek Technology	Infrared Components/ LED	18-22	↗	↔	
VCC	Indication LEDs	14	↔	↗	
Vishay	Infrared Components/ LED	10-22	↔	↔	
	Indication LEDs	10-32	↔	↔	
	UV LEDs	16-18	↗	↔	



Memory

MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
ADATA	Memory Modules	8-10	↗	↗	
	eMMC	8-10	↔	↔	
	Memory Cards	12-14	↔	↔	
	Solid State Drives (SSD)	10-12	↗	↗	
Adesto Technologies	NOR Flash	6-14	↔	↔	
	DATA Flash	10-14	↔	↔	
Alliance Memory	PC (Commodity) DRAM	10-12	↗	↗	
	Mobile DRAM	10-12	↗	↗	
	SRAM	8-12	↔	↔	
	NOR Flash	8-10	↔	↔	
Cypress	SRAM	10-30	↔	↔	
	NOR Flash	16-24	↗	↗	
	FRAM & NVSRAM	18-30	↔	↔	
Everspin Technologies	MRAM	10-16	↔	↔	
Greenliant	eMMC	24-26	↔	↔	
	Memory Cards	10-14	↔	↔	
	Solid State Drives (SSD)	12-14	↔	↔	
Kingston	PC (Commodity) DRAM	8-10	↗	↗	
	Mobile DRAM	8-10	↗	↗	
	Memory Modules	8-10	↗	↗	
	eMMC	8-10	↗	↗	
	Memory Cards	6-8	↗	↗	
	Solid State Drives (SSD)	8-10	↗	↗	
Macronix	NOR Flash	22-30	↗	↗	
	SLC NAND Flash	22-30	↗	↗	
	eMMC	12-14	↗	↔	



MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
Microchip	NOR Flash	10-18	↔	↗	
	EEPROM	10-22	↔	↗	
	EPROM	8-14	↔	↗	
Micron	PC (Commodity) DRAM	12-16	↗	↗	
	Memory Modules	14-16	↗	↗	
	eMMC	14-16	↗	↔	
	Solid State Drives (SSD)	16-18	↗	↗	
ON Semiconductor	EEPROM	10-22	↔	↗	
Renesas	SRAM	20-22	↔	↔	
Samsung	PC (Commodity) DRAM	12-16	↗	↗	
	Memory Modules	14-16	↗	↗	
	eMMC	14-16	↗	↔	
	Solid State Drives (SSD)	16-18	↗	↗	
SkyHigh Memory	SLC NAND Flash	8-10	↗	↗	
	eMMC	8-10	↔	↔	
STMicroelectronics	EEPROM	16-28	↔	↗	



Passives

MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
Apl Delevan	Inductors	22-50	↔	↔	
	Capacitors- Supercapacitors	16-18	↔	↔	
	Capacitors- Tantalum Molded	32-34	↔	↔	
	Capacitors- Tantalum Conformals	54	↔	↔	
	Capacitors- Polymer Tantalum	22	↔	↔	
AVX	Surface Mount General Capacitors- Ceramic (Less than 1 uf)	22-26	↗	↗	
	Surface Mount General Capacitors- Ceramic (Greater than 1 uf)	22-26	↗	↗	
	Leaded Capacitors- Ceramic	32	↔	↔	
	Specialty Capacitors	32-36	↔	↔	
Coilmaster Electronics	Filters- Common Mode Choke	8-10	↗	↔	
	High Frequency Transformer	10-12	↗	↗	
	Inductors	10-12	↗	↗	
	LAN Magnetics Transformer	10-12	↗	↔	
CTS	Resistor Networks	18-22	↗	↗	
Eaton	Capacitors- Supercapacitors	12-16	↔	↔	
	Inductors	16-20	↔	↔	
ELNA	Capacitors- Supercapacitors	22-32	↔	↔	
Faratronic	Capacitors- Film	16	↔	↔	
HALO Electronics	Inductors	16-20	↔	↔	
	Filters	14-20	↔	↔	
	Inductors	14-22	↗	↗	
Murata	Surface Mount General Capacitors- Ceramic (Less than 1 uf)	22-26	↗	↔	
	Surface Mount General Capacitors- Ceramic (Greater than 1 uf)	22-26	↗	↔	
	Leaded Capacitors- Ceramic	22-26	↔	↔	
	Specialty Capacitors	16-18	↔	↔	
	Electrolytic	18-32	↗	↔	
	Filters	12-20	↔	↗	
	Inductors	16-20	↔	↔	
NIC Components	Fixed Resistors	14-16	↔	↔	
	Surface Mount General Capacitors- Ceramic (Less than 1 uf)	22-24	↗	↗	
	Surface Mount General Capacitors- Ceramic (Greater than 1 uf)	22-24	↗	↗	
	Leaded Capacitors- Ceramic	28-30	↔	↔	



MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
Nichicon	Electrolytic	18-26	↗	↔	
Nippon Chemi-Con	Electrolytic	34	↗	↗	
Panasonic	Trimmers & Pots				
	Electrolytic	18-32	↗	↔	
	Capacitors- Polymer Tantalum	24-26	↗	↗	
	Inductors	22-24	↔	↔	
	Fixed Resistors	20	↗	↔	
	Resistor Networks	14	↔	↔	
Pancon Corp.- Paktron	Capactors- Film	12-14	↔	↗	
Royal Ohm	Resistor Networks	18	↗	↗	
Samwha Electric	Electrolytic	26	↗	↗	
	Fixed Resistors	48	↔	↗	
Samsung Electro-Mechanics	Surface Mount General Capacitors- Ceramic (Less than 1 uf)	22-24	↗	↗	
	Surface Mount General Capacitors- Ceramic (Greater than 1 uf)	22-24	↗	↗	
Stackploe Electronics	Fixed Resistors	20-22	↗	↗	
Sumida	Inductors	22-32	↔	↔	
TDK	Filters	28-42	↗	↗	
	Inductors	16-32	↔	↗	
	Surface Mount General Capacitors- Ceramic (Less than 1 uf)	22-24	↗	↔	
	Surface Mount General Capacitors- Ceramic (Greater than 1 uf)	24-30	↗	↗	
TDK EPCOS	Capacitors- Film	26-38	↗	↔	
	Filters	22-28	↔	↔	



MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
TT Electronics- BI Technologies	Trimmers & Pots	6-20	↔	↔	
TT Electronics- IRC	Fixed Resistors	22-32	↗	↔	
United Chemi-Con	Electrolytic	18-24	↗	↔	
Viking	Surface Mount General Capacitors- Ceramic (Less than 1 uf)	26-30	↗	↗	
	Surface Mount General Capacitors- Ceramic (Greater than 1 uf)	26-30	↗	↗	
Vishay	Trimmers & Pots	12-20	↔	↔	
	Capacitors- Film	14-22	↗	↔	
	Capacitors- Supercapacitors	16-18	↔	↔	
	Capacitors- Tantalum Molded	32	↗	↗	
	Capacitors- Tantalum Conformals	54	↔	↔	
	Capacitors- Polymer Tantalum	22	↔	↔	
	Inductors	18-32	↗	↔	
	Fixed Resistors	32-54	↗	↗	
	Surface Mount General Capacitors- Ceramic (Less than 1 uf)	20-22	↗	↔	
	Leaded Capacitors- Ceramic	14-18	↔	↔	
WIMA	Specialty Capacitors	14-16	↔	↔	
	Capacitors- Film	16-20	↗	↔	
Würth Elektronik	Inductors	18-34	↗	↗	
Yageo	Fixed Resistors	24-26	↔	↔	
	Resistor Networks	24-26	↔	↔	
	Surface Mount General Capacitors- Ceramic (Less than 1 uf)	22-26	↗	↗	
	Surface Mount General Capacitors- Ceramic (Greater than 1 uf)	22-26	↗	↗	

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