

Market Insight Q1 2022

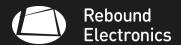


General Market Insight Analog 14 **Batteries** Connectivity 15 17 Discrete Electromechanical 21 High-End 24 25 Interconnect Opto/Lighting 27 29 Memory 31 **Passives**



General Market Insight

- In comparison to the previous months, total memory module pricing is 1-3% lower in January. While open market prices are gradually rising to match official prices, overall demand for memory components remains modest.
- Severe flooding in Malaysia is affecting manufacturing:
 - NDK's plant which manufactures quartz crystal products for automotive, 5G, and IoT applications, was entirely inundated, and it will take time to resume operations, according to reports.
 - STMicroelectronic's consolidated packaging facility located in Muar.
 - BE Semiconductor, which supplies chipmaking equipment to companies like Foxconn, STMicroelectronics, ASE, Micron, and LG Innotek, ceased operations due to massive flooding at its factory in Shah Alam, Malaysia. It expects a loss of \$28 million as a result of the disruption.
- PC processor prices are expected to climb significantly this year as a result of growing foundry costs, putting
 more pressure on downstream clients to hike pricing.
- Despite chip shortages and supply chain challenges, semiconductor companies will achieve new revenue highs
 this year, according to reports. For the first time, the industry is expected to earn over \$600 billion globally,
 despite an anticipated slowing in growth.
- The current conflict between Russia and Ukraine has the potential to raise chip material prices by 600%.
 Palladium, Helium, Neon, and Scandium are among the chip-making elements sourced from the region.
 Sanctions against Russian shipments of commercial electronics, aircraft parts, and semiconductors have been announced by the US and other countries.
- PC DIMM pricing is expected to rise as demand and production grow. The increasing production of motherboards in Q3 and Q4 of 2021 has rekindled demand.
- Eclipse Automation, a Canadian manufacturer of custom automated manufacturing equipment, is developing its
 first manufacturing facility in Malaysia's Pulau Pinang. The company's new Malaysia site has a 55,000-squarefeet manufacturing area and a 27,000-square-feet office area, from which it will serve customers in the life
 sciences, as well as the automotive, alternative energy, and consumer industries.
- According to Susquehanna Financial Group (SFG), the overall product average lead time is currently 25.8 weeks, which is 10 weeks longer than the 2018 MLCC shortage, when the number of MLCCs was at an all-time high.
 The 25.8-week high is the result of a slew of supply-chain issues that have affected manufacturers over the past almost 2 years, including factory closures due to COVID-19, extreme weather, geopolitical events, and more.
- Logistics costs have climbed 4-5 times over the industry average for the average supplier, adding to commodity price hikes. Because operations in typical lower-cost manufacturing zones have become unreliable, customers have been forced to manufacture in higher-cost areas, driving up overall production costs. In the year 2022, manufacturers are anticipated to continue to play catch-up in order to meet client demand.



- The US has imposed new sanctions on Semiconductor Manufacturing International Corp. (SMIC), which was
 blacklisted by the US in 2020. This is likely to exacerbate tensions between China and the United States in
 the ongoing trade war, which has resulted in higher shipping and production costs as a result of tariffs.
 Mobile gadgets, video game consoles, and automobile parts will all be affected by these extra penalties. The
 sanctions will have an impact on Applied Materials Inc., KLA Corp., and Lam Research, who provide SMIC
 with parts for semiconductor constructions.
- Lead times for many automotive grade and industrial ICs have been extended up to 70 weeks due to continuous industry-wide supply constraints.



AMD

• According to reports, AMD's EPYC data processors are going up in price. Prices are increasing by 10-30%.

Analog Devices

- It is becoming more expensive for ADI's packaging facility to produce its products. This has led to a 6-20% price increase across
 products and shortages are to occur on the following parts: ADM, ADC, AD8602, AD860
- The lead time for Analog Devices, Inc. (ADI) MEMs sensors is currently 60 weeks but pricing remains stable.

BOSCH

Bosch sensor lead times have begun to stretch, with low-power application sensors targeted for smartphones and wearables bearing
the brunt of the impact. Customers seeing little support from BOSCH. The affected series includes BMA253, BMA400, BMA456,
BMA422.

Diodes Inc.

• TVS Diodes, SMxxx series has a lead time of 32-50 weeks or above. Due to wafer shortages, production capacity is limited.

Infineon

- Large-scale shortages are occurring in Infineon's automotive and industrial series. The lead time has increased to 60 weeks.
- · Infineon is investing more than EUR 2 billion to construct a third module at its Malaysian facility in Kulim.



Intel

- Pricing for Intel's various series SSDs is expected to increase by 20-30%. Following parts are to be affected: S4620 480G, S4510 240G, S4510 480G, S4510 960G
- Intel's Enpirion power solutions series is being phased out, causing a surge in demand. The power management devices are used for FPGAs, SoCs, CPUs, ASICs and more. The official notice announces a LTB of March 18, 2022 (orders become non-cancellable, non-reschedule, non-returnable on this date). The last time shipment date is March 31, 2023 (contingent on global supply).

Klauke

• On February 15th, 2022, Klauke implemented a blanket 4% price increase across the board on all of their products.

Lattice

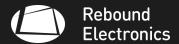
The average lead time is at 40-50 weeks. This is due to wafer shortages and disruptions at Lattice's Malaysian facility.

Maxim

• Due to the delay in ADI's acquisition of Maxim Integrated, lead times for some Maxim products have reportedly increased to 90 weeks, while the lead time for Maxim's DS series has increased to 70 weeks.

Monolithic Power Systems

MPS lead times now average 72+ weeks with major supply restrictions projected to continue in the first quarter. In February, prices
are increased by 10-20%.



Murata

According to Nikkei Asia, owing to the emergence of a Covid-19 cluster infection, Murata's MLCC production location, Fukui Takefu,
has temporarily halted several production lines. Murata pointed out that it has minimal influence on the market since the overall
supply and demand for MLCC is not tight. Despite Murata's extensive disruption prevention procedures, the company is nonetheless
severely affected. As a result, all new orders have been halted, with lead times being extended much further.

NXP

- The price of NXP's automotive parts has increased by 20%. By June 2022, another price hike of 30% is planned.
- A recent mandatory COVID-19 lockdown has impacted NXP Tianjin, its China production facility that focuses mostly on MCIMX series MCUs. As a result, lead times for automobile parts may extend beyond the existing 52-week time frame.

Onsemi

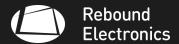
- As demand surpasses output capacity, Onsemi's FDN series MOSFETs are severely limited. Customers are unlikely to receive allocation until 2023.
- Onsemi's small size SOT packages are currently crucial with 90-week lead times.

Panasonic

• The general current standard lead time of its film capacitors is 26 weeks.

Qualcomm

ARxx Series, QCCxx Series, and CSRxx Series are expected to increase in price up to 21%



Renesas

• On March 16, parts of Japan were rocked by an earthquake, prompting Renesas to shut down its three Japanese factories: Naka, Takasaki, and Yonezawa. The shutdown of many facilities, as a key manufacturing contributor to the automotive industry, will almost certainly cause supply chain delays in the future.

Samsung

The government lockdown in the Chinese city of Xi'an due to COVID-19 has caused supply chain delays at Samsung factories.
 Samsung's Xi'an factory produces 40% of the its NAND capacity and 15% of all NAND produced worldwide. Since releasing an official statement on Dec. 29, 2021, Samsung has not commented on its present operation capacity in Xi'an during the city's lockdown.

STMicroelectronics

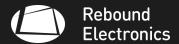
ST Micro raised prices by 16-30% across the board, with lead times ranging from 16-70 weeks. It is reported that pricing will continue
to raise on all product lines, including existing backlog, in the second quarter of 2022. Customers are not expected to receive
deliveries until Q4 2022 or Q1 2023 on all series. STM32 is particularly impacted, and spot buy price is increasing for STM32F4 &
STM32H7 series.

TDK

• Due to US-China trade clash, TDK film capacitors has a lead time of up to 52 weeks.

Torex

Price increase notice on their products in response to the soaring costs of various raw materials for wafers and packaging.



Toshiba

• Toshiba is expected to face further strains as it examines damage to production facilities after experiencing two earthquakes this year. Lead times have been reported to be as long as 1-2 years. On March 22, the company plans to resume full-scale production.

TSMC

• Component prices are expected to be affected by TSMC's 10-20% rise in mature and advanced nodes, as well as the continued silicon shortages, until this year.

Vishay

- Due to issues allocating materials for capacitor builds, as well as delays from the US-China trade war, Vishay's film capacitors have a lead time of up to 50 weeks now.
- Vishay implemented price increase on all MOSFET, automotive, LVM and HVM packages. Beginning April 7, 2022, this price increase will apply to all backlogged orders.
- Vishay also has production facilities in Ukraine, where geopolitical events have disrupted the supply of diodes and rectifiers.

Western Digital

• There was an unidentified contaminant infiltrated WD's NAND Flash production process, prompting the company's abrupt shutdown. The contamination occurred at two of its factories in Japan at the end of January which are operated by WD's joint venture partner, Kioxia. The disruption is expected to have an influence on NAND Flash pricing in Q2, as well as on SSD market.



Wima

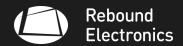
• Wima have a 30 weeks lead time for its film capacitors caused by production delays and disruptions induced by the US-China trade clash.

Wurth

Wurth's direct buying channel is now unavailable; hence the company prefers to supply directly in most circumstances.

Xilinx

- Xilinx's XC6 and XC7 series are still relatively short. According to reports, XC6 production has been decreased by 90%, and the XC7 series lead time is 47-50 weeks. Some delivery dates have been estimated to be as far out as 2024.
- The production capacity of Xilinx remains crucial, with no indications of improvements. As a result, the firm has prioritized global tier 1 customers in its service. Aerospace, military, and the US government are among the sectors that have gained support. Furthermore, no new orders are being accepted at this time, leaving backlog orders for 2022 questionable in an already fragile market.



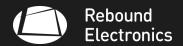
	ANALOG	PRICING TREND	LEAD TIME TREND	LEAD TIME (WEEKS)
	Amplifiers & Comparators	→	\rightarrow	26+
ard	Analog Interface	→	→	26+
Standard	Power Management	→	→	26+
0,	Converters	\rightarrow	→	26+

	MPU/MCU		PRICING TREND	LEAD TIME TREND	LEAD TIME (WEEKS)
MPU					26+
	٢	8 Bit & Lower			26+
	MCU	16 Bit			26+
	_ [32 Bit & Higher			26+
DSP					26+

PROGRAMMABLE LOGIC	PRICING TREND	LEAD TIME TREND	LEAD TIME (WEEKS)
			52

STANDARD LOGIC	PRICING TREND	LEAD TIME TREND	LEAD TIME (WEEKS)
Timing Products			26+
Interface			26+
Connectivity			26+
Standard Logic	→	÷	26+

POWER	PRICING TREND	LEAD TIME TREND	LEAD TIME (WEEKS)
FET		→	52
IGBT		→	26+
Rectifier		→	26+
Other Power		→	26+



MEMORY	PRICING TREND	LEAD TIME TREND	LEAD TIME (WEEKS)
Flash	→	→	26+
еММС			52
EEPROM	→	→	26+
DRAM			26+
SRAM	→	→	9-16
Solid State Drives	V	→	16+
SENSORS	PRICING TREND	LEAD TIME TREND	LEAD TIME (WEEKS)
			26+
ОРТО	PRICING TREND	LEAD TIME TREND	LEAD TIME (WEEKS)
LEDs (Low Power)	→	→	9-16
LEDs (Mid Power)	→	→	9-16
LEDs (High Power)	→		16+

DISCRETE	PRICING TREND	LEAD TIME TREND	LEAD TIME (WEEKS)
Small Signal		→	52
RF		→	52

 \rightarrow

 \rightarrow

 \rightarrow

26+

26+

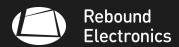
26+

Couplers

Fibre-Optic

Other Opto

Infrared



\leftrightarrow	Stable				
7	Increasing				
Ľ	Decreasing				
SMA	Selective Market Adjustment				
EOL	End-of-Life				

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

Analog

MANUFACTURER	PRODUCT	LEAD TIME (WEEKS)	TREND	PRICING	COMMENTS
AMS	Analog	10-40	\leftrightarrow	SMA	
воѕсн	Sensors	32-54	7	7	
Dienes	Multi- Source Analog/Power	32-42	7	7	
DIODES	Switching Regulators	28-48	7	7	
FTDI Chip	Interface	32-42	7	7	
	Sensors	20-54	7	7	
Infineon	Switching Regulators	42-54	7	7	
	Analog and Power for Automotive (CAN/LIN/Smart FET)	48-54	7	7	
	Signal Chain Amplifiers	22-32	7	\leftrightarrow	
Maxim Integrated	Interface	22-32	7	\leftrightarrow	Some lead times are out to 18+ weeks
	Switching Regulators	22-38	7	\leftrightarrow	
Maxlinear	Interface	12-22	7	7	
Melexis	Sensors	42-54	7	7	
	Signal Chain (Amplifiers and Data Converters)	32-42	7	\leftrightarrow	
Microchip	Timing	42-52	7	7	
	Switching Regulators	42-52	7	7	
MPS	Switching Regulators	52-60	7	7	

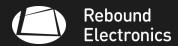


MANUFACTURER	PRODUCT	LEAD TIME (WEEKS)	TREND	PRICING	COMMENTS
	Sensors	18-54	7	7	
NXP	Interface	38-54	7	7	
	Analog and Power for Automotive (CAN/LIN/Smart FET)	48-54	7	7	
Omron	Sensors	40	\leftrightarrow	\leftrightarrow	
	Sensors	20-54	7	7	
	Signal Chain (Amplifiers and Data Converters)	38-44	7	7	
ON Semiconductor	Timing	38-44	7	7	
	Multi- Source Analog/Power	38-44	7	7	
	Switching Regulators	38-52	7	7	
Panasonic	Sensors	18-28	7	\leftrightarrow	
ЗРЕАК	Signal Chain (Amplifiers and Data Converters)	16-20	\leftrightarrow	\leftrightarrow	
	Signal Chain (Amplifiers and Data Converters)	52-62	7	7	
Renesas	Timing	52	7	7	
	Interface	42-52	7	7	
	Switching Regulators	42-52	7	7	
ROHM	Sensors	26-54	7	7	
	Switching Regulators	52	7	\leftrightarrow	
	Sensors	28-36	7	7	
	Signal Chain (Amplifiers and Data Converters)	48-54	7	7	
ST Microelectronics	Multi- Source Analog/Power	42-52	7	7	
	Switching Regulators	42-52	7	7	
	Analog and Power for Automotive (CAN/LIN/Smart FET)	42-54	7	7	
TE Sensor Solutions	Sensors	18-34	7	7	
Vishay	Sensors	26-54	7	\leftrightarrow	



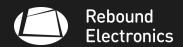
Batteries

MANUFACTURER	PRODUCT	LEAD TIME (WEEKS)	TREND	PRICING	COMMENTS
	Alkaline	12-14	\leftrightarrow	7	
Energizer	Lithium Metal	16-18	\leftrightarrow	7	
	Silver Oxide	10-12	\leftrightarrow	7	
	Alkaline	16-18	\leftrightarrow	\leftrightarrow	
	Lithium Metal	20-22	\leftrightarrow	\leftrightarrow	
GP Batteries	Lithium Ion	18-20	\leftrightarrow	\leftrightarrow	
Gr Batteries	Nickle Metal Hydride	12-14	\leftrightarrow	\leftrightarrow	
	Lead Acid	10-12	\leftrightarrow	\leftrightarrow	
	Carbon Zinc	10-12	\leftrightarrow	\leftrightarrow	
	Alkaline	12-14	\leftrightarrow	7	
	Lithium Metal	26-28	Ľ	7	
Panasonic	Nickle Metal Hydride	10-12	\leftrightarrow	7	
	Carbon Zinc	10-12	\leftrightarrow	\leftrightarrow	
	Lithium Metal	18-20	\leftrightarrow	7	
	Lithium Ion	20-22	\leftrightarrow	7	
Renata Batteries	Nickle Metal Hydride	12-14	\leftrightarrow	\leftrightarrow	
	Silver Oxide	10-12	\leftrightarrow	7	
	Carbon Zinc	10-12	\leftrightarrow	\leftrightarrow	
	Alkaline	12-14	\leftrightarrow	\leftrightarrow	
VARTA	Lithium Metal	20-26	\leftrightarrow	7	
Venter	Lithium Ion	34-40	7	7	
	Nickle Metal Hydride	12-14	\leftrightarrow	\leftrightarrow	



Connectivity

MANUFACTURER	PRODUCT	LEAD TIME (WEEKS)	TREND	PRICING	COMMENTS
AMS	RFID	30-32	7	\leftrightarrow	
	802.15.4/Zigbee Modules	28-34	71	71	
CEL	Small Signal, Schottky Diodes, PIN Diodes, Bipolar Transistors, FETs/PHEMTs, Amplifiers, Mixers & Modulators, VCOs, SS Bipolar Transistors, Wideband Transistors	32	7	7	
Cypress	Bluetooth Modules	28-38	7	7	Cypress is now Infineon
Holtek	Wireless	24	\leftrightarrow	\leftrightarrow	
HopeRF	Wireless	12	\leftrightarrow	\leftrightarrow	
Kyocera	Antennas	10-12	\leftrightarrow	\leftrightarrow	
Laird Connectivity	Wi-Fi Modules	38-54	7	7	
Zana connectanty	Antennas	18-22	7	7	
	Cellular Modules	8-12	\leftrightarrow	\leftrightarrow	
Linx Technologies	Antennas	12-14	7	7	
	Transceivers/Receivers	12-14	7	7	
Melexis	Transceivers/Receivers	18	\leftrightarrow	\leftrightarrow	
Melekis	RFID	16-18	\leftrightarrow	\leftrightarrow	
	Wi-Fi Modules	26-28	7	7	
Microchip	Bluetooth Modules	26-28	7	7	
	Transceivers/Receivers	20-22	\leftrightarrow	7	
Murata	Wi-Fi Modules	54-74	71	7	
iviui ata	Bluetooth Modules	54-66	71	71	



MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
	Multi-Protocol/Chip Solutions	54	7	7	
NXP	Transceivers/Receivers	26	\leftrightarrow	7	
	RFID	28-54	7	7	Parts on allocation
	High Power IC's	54	7	7	
ON Semiconductor	Bluetooth Modules	18-32	7	7	
Panasonic	Bluetooth Modules	42-44	7	7	
Panasonic	RFID	16-18	\leftrightarrow	\leftrightarrow	
Pulse Electronics	Antennas	10-12	\leftrightarrow	\leftrightarrow	
Semtech	Transceivers/Receivers	38	7	7	
Sierra Wireless	Multi-Protocol/Chip Solutions	42-48	7	\leftrightarrow	
	Cellular Modules	42-48	7	7	Intel based radios are at 52 weeks
Silex Technology	Wi-Fi Modules	30-54	7	7	
	Bluetooth Modules	32-42	7	7	
ST Microelectronics	Transceivers/Receivers	54	7	7	
	RFID	32-42	7	7	
Taoglas	Antennas	22-24	7	7	
	Bluetooth Modules	28-54	7	7	
U-Blox	Cellular Modules	28-54	7	7	Parts are on allocation
	GPS	28-32	7	71	Increased in pricing on some GPS modules

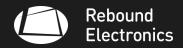


Discrete

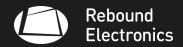
MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
	SiC Diode	22	\leftrightarrow	\leftrightarrow	
Alpha Power Solutions	SIC MOSFETS	22	\leftrightarrow	\leftrightarrow	
AVX	Varistors	16-24	\leftrightarrow	\leftrightarrow	
CEL	Optocoupler Components	22	\leftrightarrow	\leftrightarrow	
	Low Voltage MOSFETS	46-54	7	7	
	TVS Diodes	34-42	7	\leftrightarrow	
	Bridge Rectifiers	20-42	\leftrightarrow	7	
	Schottky Diodes	18-54	7	7	
	Rectifiers	20-78	\leftrightarrow	7	
Diodes Inc.	Switching Diodes	18-54	7	7	
	Small Signal MOSFETS	18-54	7	7	
	Zener Diodes	18-54	7	7	
	Bipolar Transistors	22-54	7	7	
	Digital Transistors	22-54	7	7	
	General Purpose Transistors	22-54	7	7	
	Logic	32-52	7	\leftrightarrow	
	ESD	14-16	7	7	
EATON	Fuses	16-22	7	7	
	Clips and Holders	14-18	\leftrightarrow	7	
Everlight	Optocoupler Components	26	7	7	
	IGBTs	42-54	7	7	
	Bridge Rectifiers	38-48	\leftrightarrow	7	
	Schottky Diodes	18-54	7	7	
Fairchild (ON Semiconductor)	Rectifiers	42-54	\leftrightarrow	7	
	Switching Diodes	18-54	7	7	
	Small Signal MOSFETS	18-54	7	7	
	Zener Diodes	18-54	7	7	
	Bipolar Transistors	22-54	7	7	
	Optocoupler Components	32-52	\leftrightarrow	\leftrightarrow	
	Low Voltage MOSFETS	16	7	\leftrightarrow	
Goford Semiconductor	Medium Voltage MOSFETS	16	7	\leftrightarrow	
	High Voltage MOSFETS	20	\leftrightarrow	\leftrightarrow	
Hollyfuse	Fuses	14-16	\leftrightarrow	\leftrightarrow	



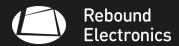
MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
	Low Voltage MOSFETS	54-68	7	7	
	High Voltage MOSFETS	54-68	\leftrightarrow	7	
	IGBTs	42-52	7	7	
Infineon	Wide Bandgap Mosfets	44-54	7	7	
	Digital Transistors	14-54	7	7	
	General Purpose Transistors	14-54	7	7	
	Mil-Aero Transistors	28-52	\leftrightarrow	\leftrightarrow	
Isocom Components	Optocoupler Components	4-6	\leftrightarrow	SMA	
	High Voltage MOSFETS	50-54	7	7	
IXYS	IGBTs	50-54	7	7	
	Thyristors/Triacs	32-42	7	7	
Keystone	Clips and Holders	12-18	7	SMA	
Lite-On	Optocoupler Components	26-32	\leftrightarrow	\leftrightarrow	
	ESD	32-50	7	7	
	Diode Arrays	32-50	7	7	
	Varistors	22-42	\leftrightarrow	\leftrightarrow	
	Wide Bandgap Mosfets	44-54	7	7	
Littelfuse	Fuses	22-26	7	\leftrightarrow	
	PTC Fuses	32-36	7	SMA	
	Clips and Holders	16-22	\leftrightarrow	\leftrightarrow	
	Thyristors/Triacs	26-42	\leftrightarrow	SMA	
	TVS Diodes	32-48	7	\leftrightarrow	
	Sensors	18-32	7	SMA	
	Low Voltage MOSFETS	22-26	7	\leftrightarrow	
	High Voltage MOSFETS	22-28	7	\leftrightarrow	
Micro Commercial Components	Schottky Diodes	22-38	7	\leftrightarrow	
	Switching Diodes	22-38	7	\leftrightarrow	
	Zener Diodes	14-38	7	\leftrightarrow	
	General Purpose Transistors	18-42	7	\leftrightarrow	



MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
	High Voltage MOSFETS	44-54	7	7	
	IGBTs	42-54	7	7	
Microsemi	Mil-Aero Diodes	34-58	\leftrightarrow	\leftrightarrow	
	Mil-Aero Transistors	34-62	\leftrightarrow	\leftrightarrow	
	Low Voltage MOSFETS	50-54	7	7	
	ESD	18-52	7	7	
	Schottky Diodes	18-54	7	7	
	Switching Diodes	18-54	7	7	
Nexperia	Small Signal MOSFETS	18-54	7	7	
	Zener Diodes	18-54	7	7	
	Bipolar Transistors	18-54	7	7	
	Digital Transistors	18-54	7	7	
	General Purpose Transistors	18-54	7	7	
	Logic	54	7	\leftrightarrow	
	Low Voltage MOSFETS	44-54	\leftrightarrow	7	
	High Voltage MOSFETS	38-54	\leftrightarrow	7	
	ESD	22-52	7	7	
	Wide Bandgap Mosfets	44-54	7	7	
	Schottky Diodes	18-54	7	7	
	Rectifiers	42-54	\leftrightarrow	7	
ON Samiaandustan	Switching Diodes	18-54	7	7	
ON Semiconductor	Small Signal MOSFETS	18-54	7	7	
	Zener Diodes	18-54	7	7	
	Bipolar Transistors	18-54	7	7	
	Digital Transistors	22-54	7	7	
	General Purpose Transistors	22-54	7	7	
	Logic	32-52	\leftrightarrow	\leftrightarrow	
ProTek Devices	Diode Arrays	14-18	7	7	
Renesas	Optocoupler Components	54	7	\leftrightarrow	
	High Voltage MOSFETS	44-54	7	\leftrightarrow	
	Wide Bandgap Mosfets	44-54	7	\leftrightarrow	
	Schottky Diodes	22-54	7	\leftrightarrow	
ROHM	Switching Diodes	22-54	7	\leftrightarrow	
	Digital Transistors	22-54	7	\leftrightarrow	
	General Purpose Transistors	22-54	7	\leftrightarrow	

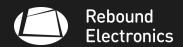


MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
	Fuses	22-42	7	7	
Schurter	Clips and Holders	22-32	7	7	
	Diode Arrays	22-24	7	7	
Semtech	Mil-Aero Diodes	42-52	\leftrightarrow	\leftrightarrow	
	Low Voltage MOSFETS	50-54	7	7	
	High Voltage MOSFETS	50-54	7	7	
	IGBTs	50-54	7	7	
	ESD	22-42	7	7	
ST Microelectronics	Wide Bandgap Mosfets	44-54	7	71	
	Thyristors/Triacs	42-52	\leftrightarrow	\leftrightarrow	
	TVS Diodes	32-42	7	7	
	Rectifiers	50-52	↔	71	
	Bipolar Transistors	22-42	7	7	
	Low Voltage MOSFETS	44-54	\leftrightarrow	7	
	High Voltage MOSFETS	38-54	\leftrightarrow	7	
	ESD	22-52	7	7	
	Wide Bandgap Mosfets	44-54	7	7	
	Schottky Diodes	18-54	7	7	
	Rectifiers	42-54	\leftrightarrow	7	
Taiwan Semiconductor	Switching Diodes	18-54	7	7	
	Small Signal MOSFETS	18-54	7	7	
	Zener Diodes	18-54	7	7	
	Bipolar Transistors	18-54	7	7	
	Digital Transistors	22-54	7	7	
	General Purpose Transistors	22-54	7	7	
	Logic	32-52	\leftrightarrow	\leftrightarrow	
TDK EPCOS	Varistors	24-30	\leftrightarrow	\leftrightarrow	
TE Connectivity	PTC Fuses	22-32	7	7	
	Low Voltage MOSFETS	54-68	7	7	
	High Voltage MOSFETS	54-68	7	7	
	TVS Diodes	32-48	7	7	
Vishay	Bridge Rectifiers	28-82	\leftrightarrow	7	
	Rectifiers	38-78	\leftrightarrow	7	
	Zener Diodes	32-62	7	7	
	Optocoupler Components	26-42	7	7	

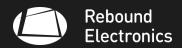


Electromechanical

MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
Aavid	Fans	14-16	7	7	
Auvi	Heatsinks	18-26	\leftrightarrow	7	
Abracon	Timing	14-56+	\leftrightarrow	7	
ADDA	Fans	16-18	\leftrightarrow	7	
Alps Electric	Switches	26-34	7	\leftrightarrow	
American Zettler	Relays	18-54+	7	SMA	
Bivar	Hardware	12-18	\leftrightarrow	\leftrightarrow	
С&К	Switches	14-32	\leftrightarrow	7	
Citizen Finedevice	Timing	14-54	\leftrightarrow	7	
COSEL	Power Supplies (AC/DC)	50	7	\leftrightarrow	
COST	Power Supplies (DC/DC)	50	7	\leftrightarrow	
стѕ	Switches	10-12	\leftrightarrow	7	
CIS	Timing	14-54	\leftrightarrow	7	
	Power Supplies (AC/DC)	26-54+	7	\leftrightarrow	
CUI Inc	Power Supplies (DC/DC)	18-54+	7	\leftrightarrow	
	Heatsinks	12-14	\leftrightarrow	\leftrightarrow	
Delta	Fans	42-54	7	\leftrightarrow	
Diodes Inc	Timing	12-52	\leftrightarrow	\leftrightarrow	



MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
E-Switch	Switches	18-20	\leftrightarrow	\leftrightarrow	
EPSON Electronics America	Timing	42+	\leftrightarrow	7	
Fox	Timing	12-42+	\leftrightarrow	7	
Grayhill	Switches	22-26	7	\leftrightarrow	
Неусо	Hardware	8-10	\leftrightarrow	\leftrightarrow	
Hongfa	Relays	18-54+	7	SMA	
Infineon	Relays	20-24	\leftrightarrow	\leftrightarrow	
IXYS	Relays	12-32	7	7	
Keystone	Hardware	8-28	7	7	
Kyocera International	Timing	30	\leftrightarrow	\leftrightarrow	
Meanwell	Power Supplies (AC/DC)	28-42	7	\leftrightarrow	
Mornsun	Power Supplies (AC/DC)	6-16	\leftrightarrow	\leftrightarrow	
	Power Supplies (DC/DC)	6-16	\leftrightarrow	\leftrightarrow	
Murata	Timing	10-12	\leftrightarrow	\leftrightarrow	
Murata Power Solutions	Power Supplies (AC/DC)	28-54	7	7	
	Power Supplies (DC/DC)	22-42	7	7	

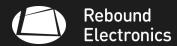


MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
Myrra	Power Supplies (AC/DC)	16-24	\leftrightarrow	7	5% increase on pricing
NKK Switches	Switches	12-20	\leftrightarrow	7	
NMB	Fans	16-18	7	\leftrightarrow	
Ohmite	Fans	12-14	7	71	
Omron	Switches	35-50	7	7	Released new price list
Panasonic	Relays	16-32	7	71	
	Switches	12-14	\leftrightarrow	\leftrightarrow	
Qualtek	Fans	16-18	\leftrightarrow	\leftrightarrow	
Raltron	Timing	12-42	\leftrightarrow	\leftrightarrow	
RECOM	Power Supplies (AC/DC)	26-54+	7	\leftrightarrow	
	Power Supplies (DC/DC)	16-38	7	\leftrightarrow	
Schneider Electric	Relays	16-18	\leftrightarrow	\leftrightarrow	
Song Chuan	Relays	26-62	7	\leftrightarrow	
SUNON	Fans	32-44	7	71	
TE Connectivity Sensors	Relays	14-16	\leftrightarrow	\leftrightarrow	
	Switches	12-14	\leftrightarrow	\leftrightarrow	
Vicor	Power Supplies (AC/DC)	28-34	7	7	
	Power Supplies (DC/DC)	28-34	7	7	



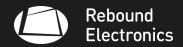
High-End

MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
Compulab	SOM	44	\leftrightarrow	\leftrightarrow	
	8 bit MCU	48-54	7	\leftrightarrow	
	32 bit MCU	48	7	\leftrightarrow	
Cypress	USB	54+	7	7	
	Automotive	34-48	7	\leftrightarrow	
DKE	E-paper Display	40-50	\leftrightarrow	\leftrightarrow	
Formerica	Fibre Optic Transceivers	20-22	7	\leftrightarrow	
Holtek	8 bit MCU	24-36	7	\leftrightarrow	
	32 bit MCU	24-36	7	\leftrightarrow	
Infineon	Automotive	Allocation	7	\leftrightarrow	
Lattice Semiconductor	FPGA	44-54+	7	7	
	8 bit MCU	54+	7	7	
	32 bit MCU	54+	7	7	
Microchip	PHY/ Ethernet	32-54	7	7	
	USB	54+	7	7	
	32 bit MPU	32-54	7	7	
Microsemi	FPGA	44-54+	7	7	
	8 bit MCU	Allocation	7	7	
	32 bit MCU	Allocation	7	7	
NXP	Automotive	Allocation	7	7	
	32 bit MPU	Allocation	7	7	
	Network Processors	Allocation	7	7	
Raystar					
	8 bit MCU	54	7	7	
Renesas	32 bit MCU	54	7	\leftrightarrow	
	Automotive	48	7	\leftrightarrow	
	32 bit MPU	48	7	7	
Renesas Synergy	32 bit MCU	42	7	SMA	
Sharp	LCDs	42-46	7	7	
	8 bit MCU	Allocation	7	7	
	Automotive	Allocation	7	7	
ST Microelectronics	32 bit MPU	42	7	7	
	STM32F0- 32 bit MCU	Allocation	\leftrightarrow	7	
	STM32F1- 32 bit MCU	Allocation	\leftrightarrow	7	
	STM32L- 32 bit MCU	Allocation	7	7	
Zilog	8 bit MCU	26-42	7	7	



Interconnect

MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
	D-Sub Connectors	18-20	7	7	
Adam Tech	PCB Connectors	18-20	7	7	
Altech Corp.	Terminal Blocks & Crimps	8-10	\leftrightarrow	71	
	D-Sub Connectors	10-12	\leftrightarrow	71	
Amphenol ICC	Data & Telecom	10-12	\leftrightarrow	71	
	PCB Connectors	10-12	7	7	
	FFC/FPC	10-12	\leftrightarrow	7	
Amphenol Sine System	Circular Connectors	22	7	7	
AVX	Lighting Connectors	12-14	\leftrightarrow	7	
Connfly	PCB Connectors	12-16	\leftrightarrow	\leftrightarrow	
Degson	Terminal Blocks & Crimps	18-20	\leftrightarrow	\leftrightarrow	
EDAC	PCB Connectors	16-24	7	\leftrightarrow	
Greenconn Technology	PCB Connectors	4	\leftrightarrow	\leftrightarrow	



MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
HALO Electronics	Data & Telecom	18-58	7	7	
HARTING	PCB Connectors	12-14	7	\leftrightarrow	
	PCB Connectors	28	71	\leftrightarrow	
Hirose Electric	RF Connectors	28	71	\leftrightarrow	
	FFC/FPC	28	71	\leftrightarrow	
тгі	PCB Connectors	28-54	71	7	
Mil-Max	PCB Connectors	6-8	\leftrightarrow	7	
IVIII-IVIAX	IC Sockets	6-8	\leftrightarrow	\leftrightarrow	
Omron	PCB Connectors	35-50	71	\leftrightarrow	Released new price list
Sullins	PCB Connectors	8-10	\leftrightarrow	\leftrightarrow	
	Automotive Connectors	32-42	7	\leftrightarrow	
	Circular Connectors	30-32	\leftrightarrow	\leftrightarrow	
	Relays	38-40	\leftrightarrow	71	
	D-Sub Connectors	10-12	\leftrightarrow	\leftrightarrow	
TE Connectivity	Data & Telecom	10-12	\leftrightarrow	\leftrightarrow	
	PCB Connectors	18-20	\leftrightarrow	\leftrightarrow	
	RF Connectors	14-16	\leftrightarrow	\leftrightarrow	
	IC Sockets	8-10	\leftrightarrow	\leftrightarrow	
	Terminal Blocks & Crimps	16-18	\leftrightarrow	\leftrightarrow	
	Lighting Connectors	10-12	\leftrightarrow	\leftrightarrow	
WAGO	Terminal Blocks & Crimps	12	71	7	
	Lighting Connectors	12	7	7	
WECO	Terminal Blocks & Crimps	14-18	7	71	



Opto/Lighting

MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
Bridgelux	Chip On Board (CoB)	12-14	\leftrightarrow	\leftrightarrow	
Dialiaha	Indication LEDs	14-18	7	\leftrightarrow	
Dialight	6V (LED Optics)	12-18	\leftrightarrow	\leftrightarrow	
	Automotive LEDs (AEC-Q101 Certified)	10-12	\leftrightarrow	\leftrightarrow	
Everlight	Infrared Components/ LED	22-24	7	\leftrightarrow	
Everignt	Indication LEDs	16-18	7	\leftrightarrow	
	UV LEDs	10-12	\leftrightarrow	\leftrightarrow	
Excellence Optoelectronics Inc.	Automotive LEDs (AEC-Q101 Certified)	10-12	\leftrightarrow	\leftrightarrow	
General Luminaire	Standard Light Engines (Level 2 Boards)	16-18	\leftrightarrow	\leftrightarrow	
Inolux	Indication LEDs	8-10	\leftrightarrow	\leftrightarrow	
Kingbright	LED Displays	12-14	\leftrightarrow	\leftrightarrow	
	Indication LEDs	10-12	\leftrightarrow	SMA	
	Infrared Components/ LED	16-18	\leftrightarrow	\leftrightarrow	
Lite-On	LED Displays	12-16	\leftrightarrow	\leftrightarrow	
	Indication LEDs	18-22	\leftrightarrow	\leftrightarrow	
Lumex	LED Displays	18	7	\leftrightarrow	
Lumex	Indication LEDs	10-16	\leftrightarrow	\leftrightarrow	
	Illumination High Power LEDs (White)	20-28	\leftrightarrow	\leftrightarrow	
	Illumination High Power LEDs (Colors)	20-28	\leftrightarrow	\leftrightarrow	
	Illumination High Power LEDs (White & Colors)	14-16	\leftrightarrow	\leftrightarrow	
	Horitcultural Mid Power LEDs (White & Colors)	6-8	Ľ	\leftrightarrow	
Lumileds	Automotive LEDs (AEC-Q101 Certified)	16-18	\leftrightarrow	\leftrightarrow	
	Chip On Board (CoB)	20-28	\leftrightarrow	\leftrightarrow	
	Standard Light Engines (Level 2 Boards)	20-28	\leftrightarrow	\leftrightarrow	
	Infrared Components/ LED	28	\leftrightarrow	\leftrightarrow	
	UV LEDs	ТВС	7	\leftrightarrow	
Meanwell	LED Drivers	12-32	\leftrightarrow	\leftrightarrow	
Murata	Lighting Controls	28-32	\leftrightarrow	\leftrightarrow	

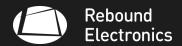


MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
	Illumination High Power LEDs (White)	14-16	\leftrightarrow	\leftrightarrow	
	Illumination High Power LEDs (Colors)	14-16	\leftrightarrow	\leftrightarrow	
Nichia	Illumination High Power LEDs (White & Colors)	10-12	\leftrightarrow	\leftrightarrow	
	Horitcultural Mid Power LEDs (White & Colors)	10-12	\leftrightarrow	\leftrightarrow	
	Chip On Board (CoB)	14-16	\leftrightarrow	\leftrightarrow	
Raystar	OLEDs	16-20	\leftrightarrow	\leftrightarrow	
	TFT Displays	26-30	\leftrightarrow	\leftrightarrow	
конм	Infrared Components/ LED	8-10	\leftrightarrow	\leftrightarrow	
	Indication LEDs	22-48	7	\leftrightarrow	
	Illumination High Power LEDs (White)	8-10	\leftrightarrow	\leftrightarrow	
	Illumination High Power LEDs (White & Colors)	10-12	\leftrightarrow	\leftrightarrow	
Samsung LED	Horitcultural Mid Power LEDs (White & Colors)	10-12	\leftrightarrow	\leftrightarrow	
	Chip On Board (CoB)	8-10	\leftrightarrow	\leftrightarrow	
	Standard Light Engines (Level 2 Boards)	12-14	\leftrightarrow	\leftrightarrow	
	Illumination High Power LEDs (White)	12-14	\leftrightarrow	\leftrightarrow	
	Illumination High Power LEDs (White & Colors)	8-10	\leftrightarrow	\leftrightarrow	
Seoul Semiconductor	Horitcultural Mid Power LEDs (White & Colors)	8-10	\leftrightarrow	SMA	
	Chip On Board (CoB)	10-12	\leftrightarrow	\leftrightarrow	
	Standard Light Engines (Level 2 Boards)	12-14	\leftrightarrow	\leftrightarrow	
Seoul Viosys	UV LEDs	10-12	\leftrightarrow	\leftrightarrow	
Stanley Electric	LED Displays	14	\leftrightarrow	\leftrightarrow	
	Indication LEDs	12-14	\leftrightarrow	\leftrightarrow	
SunLed	LED Displays	16	\leftrightarrow	\leftrightarrow	
Team Source	TFT Displays	30-40	\leftrightarrow	\leftrightarrow	
TE Connectivity	6A (Heat Sinks, LED Holders)	22-52	\leftrightarrow	\leftrightarrow	
TT Electronics- Optek Technology	Infrared Components/ LED	18-22	7	\leftrightarrow	
vcc	Indication LEDs	14	\leftrightarrow	7	
	Infrared Components/ LED	22-54	7	7	
Vishay	Indication LEDs	22-54	7	7	
	UV LEDs	16-18	7	\leftrightarrow	

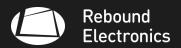


Memory

MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
ADATA	Memory Modules	12-14	\leftrightarrow	\leftrightarrow	'
	eMMC	14-18	\leftrightarrow	\leftrightarrow	
	Memory Cards	12-14	\leftrightarrow	\leftrightarrow	
	Solid State Drives (SSD)	10-14	\leftrightarrow	\leftrightarrow	
	PC (Commodity) DRAM	4-32	Ľ	\leftrightarrow	
	Mobile RAM	28-32	\leftrightarrow	\leftrightarrow	
Alliance Memory	SRAM	10-32	\leftrightarrow	7	
	NOR Flash	14-22	\leftrightarrow	\leftrightarrow	
	NAND Flash	22-54	\leftrightarrow	\leftrightarrow	
	еММС	16-18	\leftrightarrow	\leftrightarrow	
Cypress	SRAM	14-42	\leftrightarrow	7	
	NOR Flash	34-54	7	\leftrightarrow	
	FRAM & NVSRAM	18-54	7	\leftrightarrow	
Everspin Technologies	MRAM	14-30	\leftrightarrow	71	
	NOR Flash	20-30	\leftrightarrow	\leftrightarrow	
Greenliant	еММС	24-26	\leftrightarrow	\leftrightarrow	
Greeniant	Memory Cards	20-28	7	\leftrightarrow	
	Solid State Drives (SSD)	20-28	\leftrightarrow	\leftrightarrow	
	PC (Commodity) DRAM	6-8	Ľ	SMA	
Kingston	Memory Modules	6-10	\leftrightarrow	\leftrightarrow	
	еММС	6-12	Ľ	SMA	
	Memory Cards	6-22	Ľ	SMA	
	Solid State Drives (SSD)	10-14	\leftrightarrow	SMA	
Macronix	NOR Flash	22-26	Ľ	\leftrightarrow	
	SLC NAND Flash	30-34	\leftrightarrow	\leftrightarrow	
	еММС	54-56	71	7	Parts on allocation, MXIC is not quoting and not taking new orders for the time being

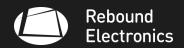


MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
		(meno	THEMO	
Microchip	SRAM	48-50	7	7	
	NOR Flash	22-54	7	7	
·	EEPROM	28-54	7	\leftrightarrow	
	EPROM	14-28	\leftrightarrow	\leftrightarrow	
	PC (Commodity) DRAM	54-56	\leftrightarrow	\leftrightarrow	
Micron	Memory Modules	54-56	7	7	
	eMMC	54-56	7	7	
	Solid State Drives (SSD)	54-56	\leftrightarrow	\leftrightarrow	
	SRAM	22-42	7	7	
ON Semiconductor	EEPROM	22-32	7	7	
Renesas	SRAM	22-24	\leftrightarrow	\leftrightarrow	
	PC (Commodity) DRAM	54-56	\leftrightarrow	\leftrightarrow	
Samsung	Memory Modules	54-56	71	,,	Parts on allocation, Samsung is not quoting and not taking new orders for the time being
	eMMC	54-56	7	7	time being
	Solid State Drives (SSD)	54-56	\leftrightarrow	\leftrightarrow	
SkyHigh Memory	SLC NAND Flash	20-22	\leftrightarrow	\leftrightarrow	
	eMMC	20-22	7	7	
STMicroelectronics	EEPROM	54-56	7	7	

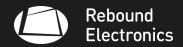


Passives

Apt Delevan Productors Pr	MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
Capacitors - Translatum Modeled Capacitors - Translatum Cordonnals Capacitors - Translatum Cordonnals S4	Apl Delevan	Inductors	16-20	\leftrightarrow	\leftrightarrow	1
ANX Capacitors - Townser Translum 22		Capacitors- Supercapacitors	16-18	\leftrightarrow	7	
AVX Capacitors Polymer Tantalum 22		Capacitors- Tantalum Molded	30-36	\leftrightarrow	\leftrightarrow	
Surface Mount General Capacitors- Common Lises Bann 1 at 1 Surface Mount General Capacitors- Common Lises Bann 1 at 1 Sepecialty Capacitors 32		Capacitors- Tantalum Conformals	54	\leftrightarrow	\leftrightarrow	
Surface Mount General Capacitors Ceramic Lives than 1 of 1 Leaded Capacitors Ceramic Automotive grade Filters Common Mode Choke New York Ceramic Capacitors	ANA	Capacitors- Polymer Tantalum	22	\leftrightarrow	\leftrightarrow	
Surface Mount General Capacitors- Ceramic (Greater than 1 of) (Greater	AVX	•	22-28	\leftrightarrow	\leftrightarrow	
Specialty Capacitors Surface Mount General Capacitors- Ceramic *Automotive grade Filters Common Mode Choke Filters Common Mode Choke Inductors Inductor / Transformers Inductor		Surface Mount General Capacitors- Ceramic	26-28	\leftrightarrow	\leftrightarrow	Excludes 1206+ sizes
Surface Mount General Capacitors- Ceramic *Automotive grade Filters- Common Mode Choke 6-8 7 7 7 7 7 7 7 7 7		Leaded Capacitors- Ceramic	32	\leftrightarrow	\leftrightarrow	
Ceramic *Automotive grade Filters - Common Mode Choke 6.8 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7.		Specialty Capacitors	32-36	\leftrightarrow	\leftrightarrow	
Miles Frequency Transformer 8-10						
Colimaster Electronics		Filters- Common Mode Choke	6-8	7	7	
LAN Magnetics Transformer 7.11 7	Coilmaster Electronics	High Frequency Transformer	8-10	7	7	
Ferrite Beads 9-10 7		Inductors	8-10	7	7	
Total Resistor Networks Eaton Capacitors-Supercapacitors 18-42 A A A A A A A A A A A A A A A A A A A		LAN Magnetics Transformer	7-11	7	\leftrightarrow	
Eaton Capacitors-Supercapacitors 32-54+		Ferrite Beads	9-10	7	\leftrightarrow	
ELIVA Capacitors Supercapacitors 22-32 7 7 7 Faratronic Capacitors Film 20-26 7	стѕ	Resistor Networks	18-42	7	7	
Inductors 12-32 71 72	Eaton	Capacitors- Supercapacitors	32-54+	7	7	
Faratronic Capacitors-Film 20-26 7		Inductors	22-32	7	7	
HALO Electronics Inductors A8-58 A Filters 38-48 A Inductor / Transformers 14-22 A A Surface Mount General Capacitors- Ceramic (Gerater than 1 uf) Leaded Capacitors- Ceramic Specialty Capacitors Electrolytic Filters 16-22 A Inductors Fixed Resistors Surface Mount General Capacitors- Ceramic (Less than 1 uf) Inductors Fixed Resistors 16-22 A Inductors Fixed Resistors Surface Mount General Capacitors- Ceramic (Less than 1 uf) Surface Mount General Capacitors- Ceramic (Less than 1 uf) Surface Mount General Capacitors- Ceramic (Less than 1 uf) Surface Mount General Capacitors- Ceramic (Less than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Surface Mount General Capacitor	ELNA	Capacitors- Supercapacitors	32-54+	7	7	
Filters 38-48 7	Faratronic	Capacitors- Film	20-26	7	\leftrightarrow	
Inductor / Transformers Surface Mount General Capacitors- Ceramic (Less than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Leaded Capacitors- Ceramic Specialty Capacitors Electrolytic Filters Inductors Inductors Fixed Resistors Inductors Fixed Resistors 14-20 Fixed Resistors 14-20 Have a components Fixed Resistors 14-20 Fixe	HALO Electronics	Inductors	48-58	7	\leftrightarrow	
Surface Mount General Capacitors- Ceramic (Less than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Leaded Capacitors- Ceramic Specialty Capacitors Electrolytic Filters Inductors Inductor Inducto		Filters	38-48	7	\leftrightarrow	
Murata Ceramic (Less than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Leaded Capacitors- Ceramic Specialty Capacitors Electrolytic Filters 16-22 7 7 Inductors 14-20 Surface Mount General Capacitors- Ceramic (Less than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Leaded Capacitors- Ceramic (Breater than 1 uf) Leaded Capacitors- Ceramic (Greater than 1 uf) Leaded Capacitors- Ceramic (Breater than 1 uf) Leaded Capacitors- Ceramic (Greater than 1 uf) Leaded Capacitors- Ceramic (Breater than 1		Inductor / Transformers	14-22	7	7	
Leaded Capacitors- Ceramic Specialty Capacitors Specialty Capa	Murata	Ceramic (Less than 1 uf)	20-26	\leftrightarrow	\leftrightarrow	
Specialty Capacitors 22-28 \$\lfootnote{\top} \footnote{\top}			32-35	\leftrightarrow	\leftrightarrow	Excludes 1206+ sizes
Electrolytic 32-52 7 7 Filters 16-22 7 NIC Components Fixed Resistors Fixed Resistors Surface Mount General Capacitors- Ceramic (Less than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Leaded Capacitors- Ceramic Leaded Capacitors- Ceramic Leaded Capacitors- Ceramic Leaded Capacitors- Ceramic 28-30 7 7 7 7 A A A A Excludes 1206+ sizes		Leaded Capacitors- Ceramic	22-26	\leftrightarrow	\leftrightarrow	
Filters 16-22 7 Inductors 16-22 7 WIC Components Fixed Resistors Surface Mount General Capacitors- Ceramic (Less than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Leaded Capacitors- Ceramic Leaded Capacitors- Ceramic Leaded Capacitors- Ceramic 28-30 A A A A A Excludes 1206+ sizes		Specialty Capacitors	22-28	\leftrightarrow	\leftrightarrow	
Inductors 16-22 71 WIC Components Fixed Resistors Surface Mount General Capacitors- Ceramic (Less than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Leaded Capacitors- Ceramic 28-30 W CHAPTER A CHAPTER A CHAPTER CHAPT		Electrolytic	32-52	7	7	
Fixed Resistors Surface Mount General Capacitors- Ceramic (Less than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Leaded Capacitors- Ceramic 24-26 32-40 CF Excludes 1206+ sizes		Filters	16-22	7	7	
Surface Mount General Capacitors- Ceramic (Less than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Leaded Capacitors- Ceramic 24-26		Inductors	16-22	7	\leftrightarrow	
Ceramic (Less than 1 uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf) Leaded Capacitors- Ceramic 24-26 32-40 Excludes 1206+ sizes	NIC Components		14-20	\leftrightarrow	\leftrightarrow	
Ceramic (Greater than 1 uf) Leaded Capacitors- Ceramic 28-30 Ceramic Excludes 1206+ sizes Capacitors- Ceramic Salary Company Salary Comp		Ceramic (Less than 1 uf)	24-26	\leftrightarrow	\leftrightarrow	
		Ceramic	32-40	\leftrightarrow	\leftrightarrow	Excludes 1206+ sizes
		Leaded Capacitors- Ceramic	28-30	\leftrightarrow	\leftrightarrow	31



MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
Nichicon	Electrolytic	48-54+	7	7	1
Nippon Chemi-Con	Electrolytic	36-40	\leftrightarrow	\leftrightarrow	
	Electrolytic	42-54+	7	7	
	Capacitors- Polymer Tantalum	32	\leftrightarrow	7	
Panasonic	Inductors / Transformers	24-30	7	\leftrightarrow	
	Fixed Resistors	54+	7	7	
	Resistor Networks	54+	7	7	
Paktron Capacitors	Capactors- Film	14-18	7	71	
Royal Ohm	Resistor Networks	10-20	\leftrightarrow	7	
Samwha Electric	Electrolytic	16-40	\leftrightarrow	\leftrightarrow	
	Fixed Resistors	48	\leftrightarrow	7	
Samsung Electro-Mechanics	Surface Mount General Capacitors- Ceramic (Less than 1	26-28	\leftrightarrow	\leftrightarrow	
	uf) Surface Mount General Capacitors- Ceramic (Greater than 1 uf)	26-28	\leftrightarrow	\leftrightarrow	Excludes 1206+ sizes
	Surface Mount General Capacitors-Ceramic *Automotive Upgrade	26-28	\leftrightarrow	\leftrightarrow	
Stackploe Electronics	Fixed Resistors	20-32	7	7	
Sumida	Inductors	28-42	7	\leftrightarrow	
Taiyo Yuden	Surface Mount General Capacitors- Ceramic (Less than 1 uf)	20-26	\leftrightarrow	\leftrightarrow	
raiyo ruueii	Surface Mount General Capacitors- Ceramic (Greater than 1 uf)	32-36	\leftrightarrow	\leftrightarrow	
	Surface Mount General Capacitors-Ceramic *Automotive Upgrade	32-36	7	71	
	Filters	42-52	7	7	
	Inductors	18-32	7	7	
TDK	Surface Mount General Capacitors- Ceramic (Less than 1 uf)	22-26	\leftrightarrow	\leftrightarrow	
	Surface Mount General Capacitors- Ceramic (Greater than 1 uf)	24-30	\leftrightarrow	7	Excludes 1206+ sizes
	Surface Mount General Capacitors-Ceramic *Automotive Upgrade	32-44	7	71	
TDK EPCOS	Capacitors- Film	26-54+	7	71	
	Filters	28-38	7	\leftrightarrow	



MANUFACTURER	PRODUCT	LEAD TIME (WKS)	TREND	PRICING	COMMENTS
TT Electronics- BI Technologies	Trimmers & Pots	6-54	7	7	•
TT Electronics- IRC	Fixed Resistors	22-54	7	7	
United Chemi-Con	Electrolytic	32-52+	7	7	
Viking	Surface Mount General Capacitors- Ceramic (Less than 1 uf)	26-28	\leftrightarrow	\leftrightarrow	
VIKING	Surface Mount General Capacitors- Ceramic (Greater than 1 uf)	26-30	7	\leftrightarrow	Excluding 1206+ sizes
	Trimmers & Pots	12-28	7	7	
	Capacitors- Film	22-32	7	7	
	Capacitors- Supercapacitors	16-22	7	\leftrightarrow	
	Capacitors- Tantalum Molded	42-52	\leftrightarrow	7	
	Capacitors- Tantalum Conformals	16-18	\leftrightarrow	\leftrightarrow	
Vishay	Capacitors- Polymer Tantalum	22-32	7	\leftrightarrow	
	Inductors / Transformers	14-22	\leftrightarrow	\leftrightarrow	
	Fixed Resistors	54+	7	7	
	Surface Mount General Capacitors- Ceramic (Less than 1 uf)	22-26	7	\leftrightarrow	
	Leaded Capacitors- Ceramic	14-18	7	\leftrightarrow	
	Specialty Capacitors	14-16	\leftrightarrow	\leftrightarrow	
WIMA	Capacitors- Film	22-32	7	7	
Wurth Elektronik	Inductors / Transformers	28-42	7	7	
	Fixed Resistors	26-30	\leftrightarrow	\leftrightarrow	
w	Resistor Networks	26-30	\leftrightarrow	\leftrightarrow	
Yageo	Surface Mount General Capacitors- Ceramic (Less than 1 uf)	22-26	\leftrightarrow	\leftrightarrow	
	Surface Mount General Capacitors- Ceramic (Greater than 1 uf)	28-32	\leftrightarrow	\leftrightarrow	Excluding 1206+ sizes
	Surface Mount General Capacitors- Ceramic *Automotive Upgrade	28-32	\leftrightarrow	\leftrightarrow	

Although every effort has been made to provide complete and accurate information, Rebound Technology Group Holdings makes no warranties, express or implied, or representations as to the accuracy of content within this document. Rebound Technology Group Holdings assumes no liability or responsibility for any error or omissions in the information contained in the Market Watch Journal.