

Commercial News

A general overview of the market situation as well as lead times and prices

Analog

High-End: Lead times are still extremely high, standard at 20-26 weeks.

Commodities: Lead times remain on a high level, prices increased.

In General: STM, ONS, MXM extended reschedule and cancellation windows for Purchase Orders or implemented NCNR rules: STM NCNR CY21/ONS-MXM rolling 120 days.



| | Lead Time (wk) | Price |
|-----------------------|----------------|-------|
| Switched Voltage Regs | ↑ 20-26 | ↔ |



| | Lead Time (wk) | Price |
|------------------|----------------|-------|
| Interface | ↑ 20-26 | ↑ |
| Op Amps High End | ↑ 20-26 | ↑ |



| | Lead Time (wk) | Price |
|-----------------------|----------------|-------|
| Data Converters | ↑↑ 12-15 | ↔ |
| Interface | ↑↑ 12-15 | ↑ |
| Interface (High End) | ↑↑ 12-15 | ↔ |
| Op Amps Commodities | ↑↑ 12-15 | ↑ |
| Op Amps High End | ↑↑ 12-15 | ↔ |
| Peripherals | ↑↑ 12-15 | ↔ |
| Switched Voltage Regs | ↑↑ 12-15 | ↔ |
| Voltage Regulators | ↑↑ 12-15 | ↔ |



| | Lead Time (wk) | Price |
|-----------------------|----------------|-------|
| Interface | ↑ 20-26 | ↑ |
| Op Amps Commodities | ↑ 6-26 | ↑ |
| Op Amps High End | ↑ 20-26 | ↑ |
| Switched Voltage Regs | ↑ 20-26 | ↑ |
| Voltage Regulators | ↑ 20-32 | ↑ |



| | Lead Time (wk) | Price |
|-----------------------|----------------|-------|
| Data Converters | ↑ 16-22 | ↑ |
| Interface | ↑ 16-22 | ↑ |
| Op Amps High End | ↑ 16-22 | ↑ |
| Switched Voltage Regs | ↑ 16-22 | ↑ |

| | Lead Time (wk) | Price |
|-----------------------|----------------|-------|
| Data Converters | ↑ 20-26 | ↑ |
| Interface | ↑ 20-26 | ↑ |
| Op Amps Commodities | ↑ 16-26 | ↑ |
| Op Amps High End | ↑ 20-26 | ↑ |
| Switched Voltage Regs | ↑ 20-26 | ↑ |
| Voltage Regulators | ↑ 12-20 | ↑ |

Commercial News

A general overview of the market situation as well as lead times and prices

Discretes

We are faced with an ongoing tight Semiconductor market worldwide. There are no signs that this situation with long lead times, constraint capacities and limited supply will change soon. Also for H2 CY2021 we expect a very strong market.



| | Lead Time (wk) | Price |
|---------|----------------|-------|
| Sensors | ↑ 12-40 | ↑ |



| | Lead Time (wk) | Price |
|------------|----------------|-------|
| RF Devices | ↑ 28-50 | ↑ |



| | Lead Time (wk) | Price |
|----------------|----------------|-------|
| Bi-polar Power | ↑ 16-52 | ↑ |
| IGBT | ↑ 12-50 | ↑ |
| Power MOSFETs | ↑ 20-52 | ↑ |
| Rectifiers | ↑ 18-52 | ↑ |
| RF Devices | ↔ 20-45 | ↔ |
| Sensors | ↑ 18-50 | ↔ |
| Small Signal | ↑ 18-52 | ↑ |
| Thyristors | ↑ 20-52 | ↑ |



| | Lead Time (wk) | Price |
|---------|----------------|-------|
| Sensors | ↑↑ 12-15 | ↑ |



| | Lead Time (wk) | Price |
|----------------|----------------|-------|
| Bi-polar Power | ↑ 20-34 | ↑ |
| Power MOSFETs | ↑ 26-52 | ↑ |
| Small Signal | ↑ 19-52 | ↑ |
| TVS/Protection | ↑ 24-52 | ↑ |
| Zener Diodes | ↑ 20-52 | ↑ |



| | Lead Time (wk) | Price |
|------------|----------------|-------|
| RF Devices | ↔ 20-30 | ↑ |
| Sensors | ↑ 30-40 | ↑ |



| | Lead Time (wk) | Price |
|----------------|----------------|-------|
| Bi-polar Power | ↑ 20-52 | ↑ |
| IGBT | ↑ 22-52 | ↑ |
| Power MOSFETs | ↑ 18-52 | ↑ |
| Rectifiers | ↑ 20-52 | ↑ |
| Small Signal | ↑ 20-52 | ↑ |
| TVS/Protection | ↑ 22-52 | ↑ |
| Zener Diodes | ↑ 18-52 | ↑ |

Commercial News

A general overview of the market situation as well as lead times and prices

Discretes

We are faced with an ongoing tight Semiconductor market worldwide. There are no signs that this situation with long lead times, constraint capacities and limited supply will change soon. Also for H2 CY2021 we expect a very strong market.



life.augmented

| | Lead Time (wk) | Price |
|----------------|----------------|-------|
| Bi-polar Power | ↑ 20-52 | ↑ |
| IGBT | ↔ 30-42 | ↑ |
| Rectifiers | ↑ 30-52 | ↑ |
| Small Signal | ↑ 26-52 | ↑ |
| Thyristors | ↑ 25-52 | ↑ |
| TVS/Protection | ↑ 25-52 | ↑ |

TOSHIBA

| | Lead Time (wk) | Price |
|---------------|----------------|-------|
| Power MOSFETs | ↑ 20-36 | ↑ |



| | Lead Time (wk) | Price |
|----------------|----------------|-------|
| Power MOSFETs | ↑ 25-52 | ↑ |
| Rectifiers | ↑ 18-52 | ↑ |
| Small Signal | ↑ 34-52 | ↑ |
| Thyristors | ↑ 22-52 | ↑ |
| TVS/Protection | ↑ 28-52 | ↑ |
| Zener Diodes | ↑ 22-52 | ↑ |

Commercial News

A general overview of the market situation as well as lead times and prices

Memory

ALL PRICE TENDENCIES ARE INDICATED IN USD

Please provide long-term demand on all technologies. Forecast/Order backlog is key for supply.

- DRAM:** Allocation, increasing pricing on all technologies, DDR3/LPDDR4 critical, supply extremely low
- NAND Flash:** Allocation, supply very constrained on specific technologies (eMMC, SLC), increasing pricing and lead times
- NOR Flash:** Allocation, supply very constrained, increasing pricing and lead times
- SRAM:** Supply constraints on specific technologies



| | Lead Time (wk) | Price |
|------------------|----------------|-------|
| Serial NOR Flash | ↑↑ 24-30 | ↑ |



| | Lead Time (wk) | Price |
|------|----------------|-------|
| FRAM | ↑↑ 24-30 | ↑ |



| | Lead Time (wk) | Price |
|----------------------------------|----------------|-------|
| FRAM | ↑↑ 24-36 | ↑ |
| nvSRAM | ↑↑ 24-36 | ↔ |
| Parallel NOR Flash ^{x1} | ↑↑ 24-36 | ↑ |
| Serial NOR Flash ^{x1} | ↑↑ 24-36 | ↑ |
| SRAM Asynch. | ↑↑ 24-36 | ↑ |
| SRAM Synch. | ↑↑ 24-36 | ↑ |

^{x1} Allocation



| | Lead Time (wk) | Price |
|--|----------------|-------|
| DDR/mobile DDR | ↑ 12-24 | ↑ |
| DDR2/LPDDR2 | ↑↑ 12-32 | ↑↑ |
| DDR3/DDR3L | ↑↑ 16-40 | ↑↑ |
| DDR4/LPDDR4 | ↑ 16-24 | ↑ |
| Managed NAND (eMMC, UFS) ^{x1} | ↑↑ 40 | ↑ |
| NAND (SLC,MLC,TLC,3D) | ↑ 16-24 | ↑ |
| Parallel NOR Flash ^{x1} | ↑ 14-18 | ↑ |
| SDRAM/mobile SDRAM | ↑↑ 12-36 | ↑ |
| Serial NOR Flash ^{x1} | ↑↑ 20-40 | ↑ |
| SRAM Asynch. | ↑ 8-12 | ↑ |
| SRAM Synch. | ↑ 8-12 | ↑ |

^{x1} Allocation



| | Lead Time (wk) | Price |
|--------------------------|----------------|-------|
| Managed NAND (eMMC, UFS) | ↑↑ 36-48 | ↑ |
| NAND (SLC,MLC,TLC,3D) | ↑ 24-28 | ↑ |
| SSD | ↑ 12-16 | ↔ |

Commercial News

A general overview of the market situation as well as lead times and prices

Memory

ALL PRICE TENDENCIES ARE INDICATED IN USD

Please provide long-term demand on all technologies. Forecast/Order backlog is key for supply.

DRAM: Allocation, increasing pricing on all technologies, DDR3/LPDDR4 critical, supply extremely low

NAND Flash: Allocation, supply very constrained on specific technologies (eMMC, SLC), increasing pricing and lead times

NOR Flash: Allocation, supply very constrained, increasing pricing and lead times

SRAM: Supply constraints on specific technologies



| | Lead Time (wk) | Price |
|------------------|----------------|-------|
| EEProm | ↑↑ 5-52 | ↑ |
| Eprom | ↑↑ 5-52 | ↑ |
| Serial NOR Flash | ↑↑ 24-28 | ↑ |



| | Lead Time (wk) | Price |
|----------------|----------------|-------|
| EEProm | ↔ 8-12 | ↔ |
| FIFO | ↑ 16-20 | ↑↑ |
| SRAM Asynch. | ↑ 20-24 | ↑↑ |
| SRAM Multiport | ↑ 16-20 | ↑↑ |
| SRAM Synch. | ↑ 20-24 | ↑↑ |



| | Lead Time (wk) | Price |
|--|----------------|-------|
| DDR/mobile DDR ^{x1} | ↑↑ 20-24 | ↑ |
| DDR2/LPDDR2 ^{x1} | ↑↑ 20-24 | ↑ |
| DDR3/DDR3L ^{x1} | ↑↑ 24-28 | ↑ |
| DDR4/LPDDR4 ^{x1} | ↑↑ 24-28 | ↑↑ |
| Managed NAND (eMMC, UFS) ^{x1} | ↑↑ 24-28 | ↑↑ |
| microSD ^{x1} | ↑↑ 20-24 | ↑↑ |
| NAND (SLC,MLC,TLC,3D) ^{x1} | ↑↑ 24-28 | ↑ |
| Parallel NOR Flash ^{x1} | ↑↑ 24-28 | ↑↑ |
| SDRAM/mobile SDRAM ^{x1} | ↑↑ 20-24 | ↑ |
| Serial NOR Flash ^{x1} | ↑↑ 24-28 | ↑↑ |
| SSD ^{x1} | ↑↑ 20-24 | ↑↑ |

^{x1} Allocation

SAMSUNG

| | Lead Time (wk) | Price |
|--|----------------|-------|
| DDR2 ^{x1} | ↑↑ 14-20 – EOL | ↑↑ |
| DDR3/DDR3L ^{x1} | ↑↑ 16-22 | ↑↑ |
| DDR4/LPDDR4 ^{x1} | ↑↑ 16-22 | ↑↑ |
| Managed NAND (eMMC, UFS) ^{x1} | ↑↑ 16-22 | ↑↑ |
| SSD ^{x1} | ↑ 14-16 | ↑ |

^{x1} Allocation



| | Lead Time (wk) | Price |
|------------------|----------------|-------|
| EEProm | ↑ 7-21 | ↑ |
| Serial NOR Flash | ↑ 16-20 | ↑ |

| | Lead Time (wk) | Price |
|--------|----------------|-------|
| EEProm | ↑↑ 8-52 | ↑ |
| NVRAM | ↑ 16-24 | ↔ |

Commercial News

A general overview of the market situation as well as lead times and prices

Opto

Lead times remain on a very high level. Osram: some products still on allocation. Partly price increases.



| | Lead Time (wk) | Price |
|-------------------------------------|----------------|-------|
| LEDs High Power General Lighting | ↔ 4-6 | ↔ |
| LEDs Low/Mid Power General Lighting | ↑ 4-6 | ↔ |



| | Lead Time (wk) | Price |
|--------------------|----------------|-------|
| Coupler | ↑ 18-30 | ↑ |
| LEDs High Power | ↑↑ 10-30 | ↔ |
| LEDs Low/Mid Power | ↑ 16-20 | ↑ |



| | Lead Time (wk) | Price |
|--------------------|----------------|-------|
| Coupler | ↑↑ 18-30 | ↑ |
| LED's High Power | ↑↑ 8-26 | ↔ |
| LEDs Infrared | ↑↑ 6-24 | ↑ |
| LEDs Low/Mid Power | ↑ 22-24 | ↑ |
| LEDs Ultraviolet | ↑ 6-20 | ↔ |



| | Lead Time (wk) | Price |
|-----------|----------------|-------|
| LED Optic | ↔ 4-6 | ↔ |



| | Lead Time (wk) | Price |
|-------------------------------------|----------------|-------|
| LED's High Power | ↔ 6-10 | ↔ |
| LEDs High Power General Lighting | ↔ 6-8 | ↔ |
| LEDs Infrared | ↑ 6-12 | ↑ |
| LEDs Low/Mid Power General Lighting | ↔ 6-8 | ↔ |
| LEDs Ultraviolet | ↑ 6-8 | ↔ |



| | Lead Time (wk) | Price |
|---------|----------------|-------|
| Coupler | ↑↑ 8-51 | ↑↑ |

Commercial News

A general overview of the market situation as well as lead times and prices

Opto

Lead times remain on a very high level. Osram: some products still on allocation. Partly price increases.

OSRAM

| | Lead Time (wk) | Price |
|--|----------------|-------|
| LED's High Power ^{x1} | ↑↑ 10-36 | ↔ |
| LEDs High Power General Lighting ^{x2} | ↑↑ 10-34 | ↔ |
| LEDs Infrared | ↑ 8-24 | ↔ |
| LEDs Low/Mid Power ^{x3} | ↑↑ 10-26 | ↑ |
| LEDs Low/Mid Power General Lighting | ↑↑ 12-24 | ↑ |

^{x1} Official allocation KW H2L531.TE, KW H3L531.TE, LUW HWQP
Tight Supply LA H9PP 20-24 weeks, KW H4L531.TE, KW H5L531.TE, LCY CEUP 16-20 weeks LUW H9QP – PDN announced, LTO 15.11.20
Official allocation LUW CEUP.CE, LCY CEUP
Official Allocation:
KW CELNM1.TG, KW2 CFLNM1.TG, KY CELNM1.FY, KW CELNM2.TK;
Tight Supply: KW2 CFLNMx.xx 26-28 weeks; Kx CELNMx.xx 30 weeks LE UW Q9WP discontinued; LE UW D1Wxxx discontinued; LTO 30.11.20 (LT on request APT (LA G6SP.01, LS G6SP.01, LA G6SP, LS G6SP, LY G6SP); LS G6SP, LS G6SP.01;
No change, the allocation end date is planned for end of March 2021.
LA G6SP.01, LA G6SP, LY G6SP:
The allocation end date has been newly changed to end of June 2021.
^{x2} Official allocation on: OSLO Square HyperRed/Deepblue, OSLO Square White; Tight supply (20-34 weeks) on Duris S5, Duris S8, OSQONIQ S3030, OSQONIQ P2226, OSLO SSL white & color,
^{x3} Allocation Update:
* TOPLED (LA T67F; LW TVSG.CB):
- LA T67F: The allocation end date is set to end of December 2021.
- LW TVSG.CB: The allocation end date is set for end of December 2021
* TOPLED E1608 (KW DELPS2.RA; KW DELSS2.RA, KS DELPS1.22):
No change, the allocation end date is set to end of March 2022
* MiniTOPLED (LW M67C):
No change, the allocation end date is set to end of March 2022
* PowerTOPLED (LA E67F, LY E67F):
The allocation end date is set to end of December 2021
* 6-lead MULTILED (LRTB GVSG):
The allocation end date was newly set for end of October 2021
* SYNIOS P2720 (KR DMLQ31.23, KW DMLN31.SG, KW DMLN33.SG, KR DMLN31.23, KY DMLQ31.FY, KY DMLN31.23, KR DMLS31.23):
The allocation end date is set to March 2022

RENESAS

| | Lead Time (wk) | Price |
|---------|----------------|-------|
| Coupler | ↑↑ 12-30 | ↑↑ |

SAMSUNG

| | Lead Time (wk) | Price |
|---|----------------|-------|
| LED's High Power | ↑ 8-10 | ↔ |
| LEDs High Power General Lighting ^{x1} | ↑ 10-12 | ↑ |
| LEDs Low/Mid Power | ↑ 8-12 | ↔ |
| LEDs Low/Mid Power General Lighting ^{x2} | ↑ 8-14 | ↔ |

^{x1} increased lead times for LH351B/C/D/H
^{x2} LM301B 12-14 weeks

TOSHIBA

| | Lead Time (wk) | Price |
|---------|----------------|-------|
| Coupler | ↑↑ 12-52 | ↑↑ |

VISHAY

| | Lead Time (wk) | Price |
|-----------------------------|----------------|-------|
| Coupler | ↑↑ 8-48 | ↑↑ |
| LED's High Power | ↑↑ 7-52 | ↔ |
| LEDs Infrared ^{x1} | ↑↑ 6-24 | ↑ |
| LEDs Low/Mid Power | ↑↑ 10-32 | ↑↑ |
| LEDs Ultraviolet | ↔ 6-20 | ↔ |

^{x1} 0805 SMD up to 35 weeks
IR receiver up to 18 weeks*

Commercial News

A general overview of the market situation as well as lead times and prices

MCU & DSP

Microcontroller lead times are still very long:

NXP is at 30-50 weeks, **REN** is at 24-30 weeks, **STM** on allocation for several families.

Microchip: Latest price increase is effective from 01.09.2021. The percentage adjustments vary by device. Lead time remains stable on high level, but can be shortened by joining PSP

NXP: Prices have been increased by 10% on average on the 1st of September 2021



| | Lead Time (wk) | Price |
|--------|----------------|-------|
| 8 Bit | ↑ 18-36 | ↑ |
| 16 Bit | ↑ 16-36 | ↑ |
| 32 Bit | ↑ 16-26 | ↑ |



| | Lead Time (wk) | Price |
|------|----------------|-------|
| MCUs | ↑ 24-30 | ↑ |



| | Lead Time (wk) | Price |
|--------|----------------|-------|
| 8 Bit | ↑ 20-40 | ↑ |
| 16 Bit | ↑ 20-45 | ↑ |
| 32 Bit | ↑↑ 30-50 | ↑ |



| | Lead Time (wk) | Price |
|-----------|----------------|-------|
| 8 Bit AVR | ↔ 40-52 | ↑↑ |
| 8 Bit PIC | ↔ 38-52 | ↑↑ |
| 16 Bit | ↔ 42-52 | ↑↑ |
| 32 Bit | ↔ 38-52 | ↑↑ |



| | Lead Time (wk) | Price |
|--------|----------------|-------|
| 8 Bit | ↑↑ 30-50 | ↑↑ |
| 16 Bit | ↑ 30-50 | ↑↑ |
| 32 Bit | ↑↑ 30-50 | ↑↑ |
| i.MX | ↑↑ 30-50 | ↑↑ |
| DSP | ↑↑ 30-50 | ↑↑ |

Commercial News

A general overview of the market situation as well as lead times and prices

Program. Logic

For the time being, there is no impact on the supply chain. Due to the new Covid outbreak in July, new restrictions have been imposed. However, the factories have not been affected by them. The longest lead time is steadily 52 weeks, more parts are coming in, however, Xilinx rectified their forecast and expects some relief Q2-Q3 calendar year 2022 instead of 2023. Pricing as well as expedite requests stay stable, which regards standard and not expedite with extra fees. Xilinx insists on encouraging customers to place orders for the next 12-18 months to make sure the orders are in the pipeline.

Here you have some of the parts coming in with a lead time of 52 weeks, changed from 13 weeks in May:

Spartan-7 Family XC7S25
 SPARTAN3AN Family XC3S400AN
 VIRTEX-UP Family XCVU31P
 ARTIX-7 Family
 XC7A100T
 XC7A12T
 XC7A15T
 XC7A200T
 XC7A25T
 XC7A35T
 XC7A50T
 XC7A75T
 KINTEX-7 Family
 XC7K160T
 XC7K325T
 XC7K355T
 XC7K410T
 XC7K480T
 XC7K70T

Microchip: Latest price increase is effective from 01.09.2021. The percentage adjustments vary by device. Lead time remains stable on high level, but can be shortened by joining PSP.



| | Lead Time (wk) | Price |
|----------------|----------------|-------|
| Program. Logic | ↔ 20-48 | ↑↑ |



| | Lead Time (wk) | Price |
|----------------|----------------|-------|
| Program. Logic | ↔ 13-52 | ↔ |

Commercial News

A general overview of the market situation as well as lead times and prices

Logic

Prices and lead times remain high with limited supply. In general: ONS, NXE extended reschedule and cancellation windows for Purchase Orders or implemented NCNR rules.

nexperia

| | Lead Time (wk) | Price |
|----------------|----------------|-------|
| Standard Logic | ↑ 20-26 | ↑ |

TOSHIBA

| | Lead Time (wk) | Price |
|----------------|----------------|-------|
| Standard Logic | ↑ 18-28 | ↑ |

onsemi

| | Lead Time (wk) | Price |
|----------------|----------------|-------|
| Standard Logic | ↑ 18-52 | ↑ |