

# Coronavirus Survey

Results of Manufacturer & Distributor Survey Ended Feb 7, 2020

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## **Introduction**

As the impact of the Coronavirus continues to grow in China and around the world there is a need to provide visibility on how this crisis is impacting the electronics components industry and the supply chain. (See Figure 1) In order to provide important visibility, ECIA conducted a survey of member manufacturing and distributor companies to gain an understanding of this fluid situation. This report provides the results of the survey which ended February 7, 2020.

The data presented here is based on the aggregated results of the survey. It was necessary to combine the results from the distributor and manufacturer surveys to capture enough data to provide valid results. Given current expectations that this crisis will continue to evolve over the coming weeks ECIA will survey members again this week. ECIA members are encouraged to support this survey in order to enhance industry understanding of impact of the Coronavirus on the electronics components supply chain.

Detailed data by component type is provided for the major categories of:

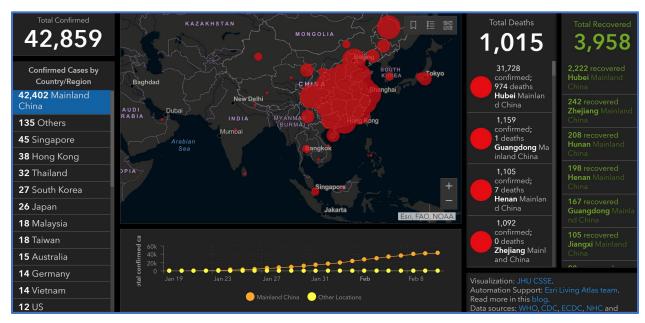
- Electro-Mechanical
- Passives
- Semiconductors

A top level average of each of these categories is provided in the overview at the beginning of the report.



## Figure 1 – Wuhan Coronavirus (2019-nCoV) Global Cases

The following link provides access to this application that provides live updates on the spread of the Coronavirus - <u>"Wuhan Coronavirus (2019-nCoV) Global Cases"</u>



# Top Level Averages

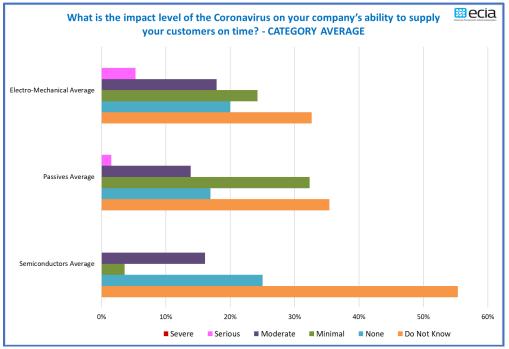
Even though the industry has previous experience with the disruptive SARS epidemic, the regional distribution of electronics production and structure of supply chains has changed significantly in the intervening years. The most notable result from the surveys is that many, if not most, companies do not understand how their supply chains and customers will be impacted by this crisis. The semiconductor industry appears to struggle with the poorest visibility.

While the survey results show that most companies expect no or minimal impact, there are still a significant number that believe the disruption will last for a month or more. More surprising is the number of companies that believe the crisis will result in lead times extending by an addition two weeks or more.

Brief analysis of the survey results point to the need for continued research as companies work to improve their understanding of how the Coronavirus is/will impact their supply chains.

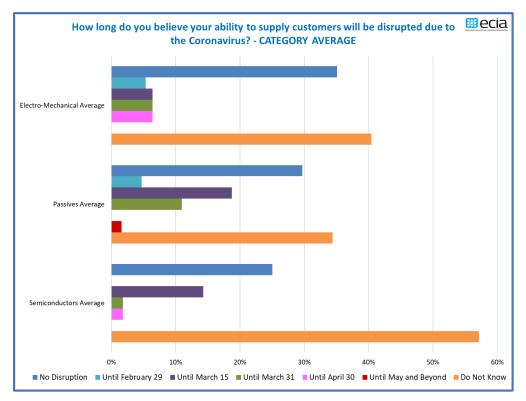


## Figure 2 – On Time Supply Impact Average on Top Level Categories

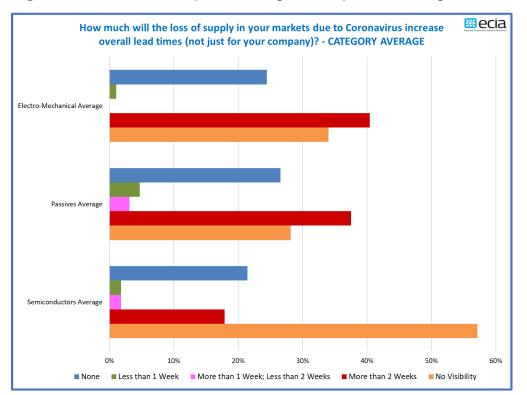


Source: ECIA

## Figure 3 – Supply Disruption Recovery Average on Top Level Categories





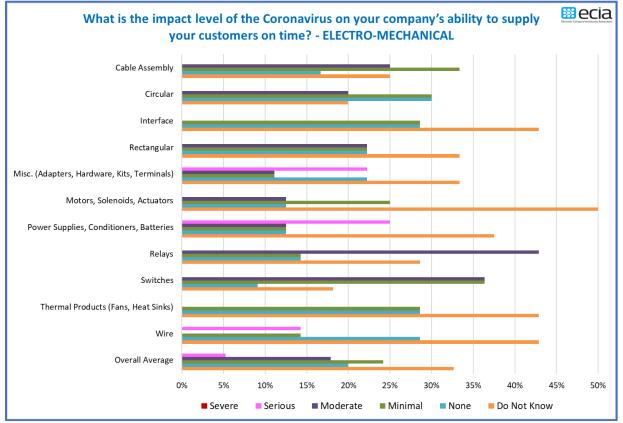


## Figure 4 – Lead Time Impact Average on Top Level Categories



# **Electro-Mechanical Survey Results**

### Figure 5 – On Time Supply Impact – Electro-Mechanical



Source: ECIA

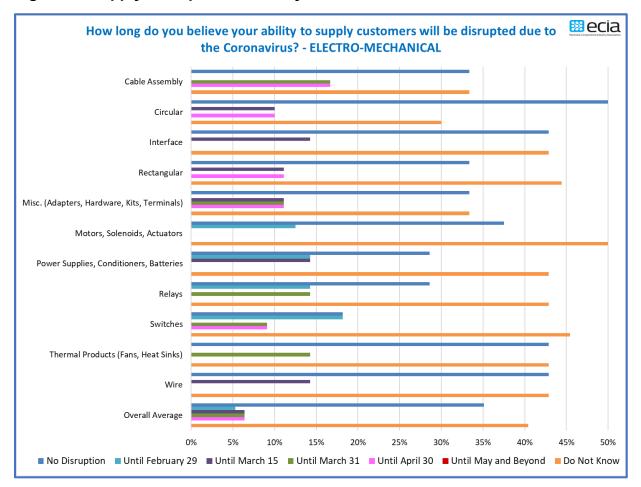
## Table 1 – On Time Supply Impact – Electro-Mechanical

What is the impact level of the Coronavirus on your company's ability to supply your customers on time?

| COMPONENT                                   | Severe | Serious | Moderate | Minimal | None | Do Not Know |
|---|--------|---------|----------|---------|------|-------------|
| Cable Assembly                              | 0%     | 0%      | 25%      | 33%     | 17%  | 25%         |
| Circular                                    | 0%     | 0%      | 20%      | 30%     | 30%  | 20%         |
| Interface                                   | 0%     | 0%      | 0%       | 29%     | 29%  | 43%         |
| Rectangular                                 | 0%     | 0%      | 22%      | 22%     | 22%  | 33%         |
| Misc. (Adapters, Hardware, Kits, Terminals) | 0%     | 22%     | 11%      | 11%     | 22%  | 33%         |
| Motors, Solenoids, Actuators                | 0%     | 0%      | 13%      | 25%     | 13%  | 50%         |
| Power Supplies, Conditioners, Batteries     | 0%     | 25%     | 13%      | 13%     | 13%  | 38%         |
| Relays                                      | 0%     | 0%      | 43%      | 14%     | 14%  | 29%         |
| Switches                                    | 0%     | 0%      | 36%      | 36%     | 9%   | 18%         |
| Thermal Products (Fans, Heat Sinks)         | 0%     | 0%      | 0%       | 29%     | 29%  | 43%         |
| Wire  | 0%     | 14%     | 0%       | 14%     | 29%  | 43%         |
| Overall Average                             | 0%     | 5%      | 18%      | 24%     | 20%  | 33%         |



### Figure 6 – Supply Disruption Recovery – Electro-Mechanical



Source: ECIA

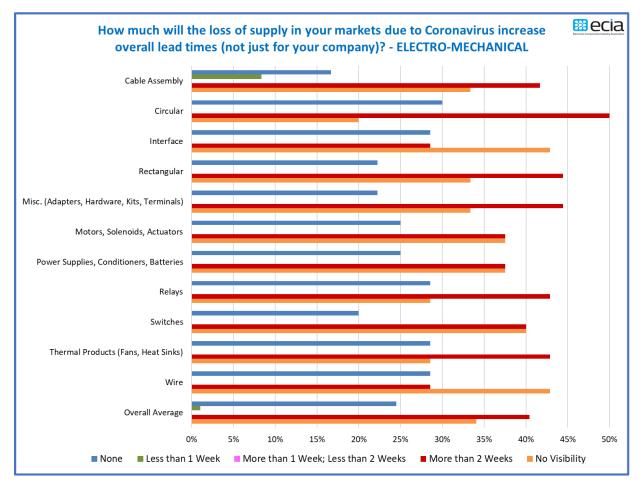
### Table 2 – Supply Disruption Recovery – Electro-Mechanical

How long do you believe your ability to supply customers will be disrupted due to the Coronavirus?

|   | Until February |     |                |                |                | Until May and |             |  |
|---|----------------|-----|----------------|----------------|----------------|---------------|-------------|--|
| COMPONENT                                   | No Disruption  | 29  | Until March 15 | Until March 31 | Until April 30 | Beyond        | Do Not Know |  |
| Cable Assembly                              | 33%            | 0%  | 0%             | 17%            | 17%            | 0%            | 33%         |  |
| Circular                                    | 50%            | 0%  | 10%            | 0%             | 10%            | 0%            | 30%         |  |
| Interface                                   | 43%            | 0%  | 14%            | 0%             | 0%             | 0%            | 43%         |  |
| Rectangular                                 | 33%            | 0%  | 11%            | 0%             | 11%            | 0%            | 44%         |  |
| Misc. (Adapters, Hardware, Kits, Terminals) | 33%            | 0%  | 11%            | 11%            | 11%            | 0%            | 33%         |  |
| Motors, Solenoids, Actuators                | 38%            | 13% | 0%             | 0%             | 0%             | 0%            | 50%         |  |
| Power Supplies, Conditioners, Batteries     | 29%            | 14% | 14%            | 0%             | 0%             | 0%            | 43%         |  |
| Relays                                      | 29%            | 14% | 0%             | 14%            | 0%             | 0%            | 43%         |  |
| Switches                                    | 18%            | 18% | 0%             | 9%             | 9%             | 0%            | 45%         |  |
| Thermal Products (Fans, Heat Sinks)         | 43%            | 0%  | 0%             | 14%            | 0%             | 0%            | 43%         |  |
| Wire  | 43%            | 0%  | 14%            | 0%             | 0%             | 0%            | 43%         |  |
| Overall Average                             | 35%            | 5%  | 6%             | 6%             | 6%             | 0%            | 40%         |  |



### Figure 7 – Lead Time Impact Average – Electro-Mechanical



Source: ECIA

### Table 3 – Lead Time Impact Average – Electro-Mechanical

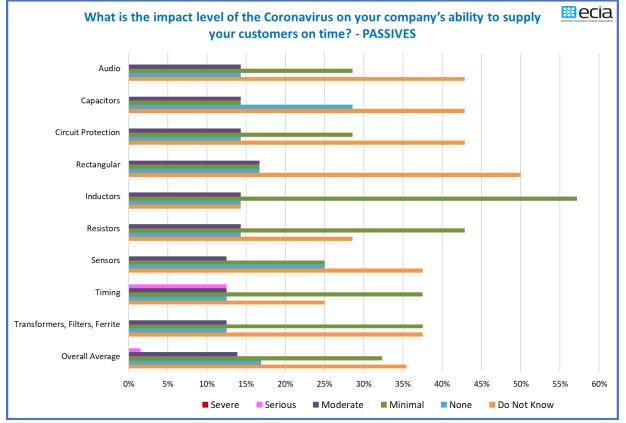
How much will the loss of supply in your markets due to Coronavirus increase overall lead times (not just for your company)?

|   |      | Less than 1 | More than 1<br>Week; Less | More than 2 |               |
|---|------|-------------|---------------------------|-------------|---------------|
| COMPONENT                                   | None | Week        | than 2 Weeks              | Weeks       | No Visibility |
| Cable Assembly                              | 17%  | 8%          | 0%                        | 42%         | 33%           |
| Circular                                    | 30%  | 0%          | 0%                        | 50%         | 20%           |
| Interface                                   | 29%  | 0%          | 0%                        | 29%         | 43%           |
| Rectangular                                 | 22%  | 0%          | 0%                        | 44%         | 33%           |
| Misc. (Adapters, Hardware, Kits, Terminals) | 22%  | 0%          | 0%                        | 44%         | 33%           |
| Motors, Solenoids, Actuators                | 25%  | 0%          | 0%                        | 38%         | 38%           |
| Power Supplies, Conditioners, Batteries     | 25%  | 0%          | 0%                        | 38%         | 38%           |
| Relays                                      | 29%  | 0%          | 0%                        | 43%         | 29%           |
| Switches                                    | 20%  | 0%          | 0%                        | 40%         | 40%           |
| Thermal Products (Fans, Heat Sinks)         | 29%  | 0%          | 0%                        | 43%         | 29%           |
| Wire  | 29%  | 0%          | 0%                        | 29%         | 43%           |
| Overall Average                             | 24%  | 1%          | 0%                        | 40%         | 34%           |



# **Passives Survey Results**

#### Figure 8 – On Time Supply Impact – Passives



Source: ECIA

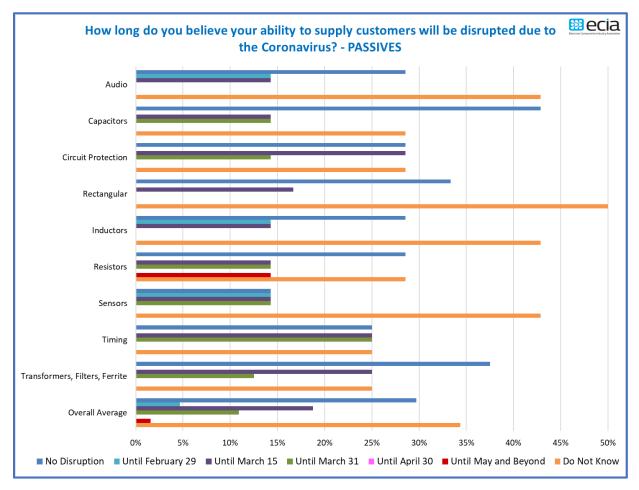
### Table 4 – On Time Supply Impact – Passives

What is the impact level of the Coronavirus on your company's ability to supply your customers on time?

| COMPONENT                      | Severe | Serious | Moderate | Minimal | None | Do Not Know |
|--------------------------------|--------|---------|----------|---------|------|-------------|
| Audio                          | 0%     | 0%      | 14%      | 29%     | 14%  | 43%         |
| Capacitors                     | 0%     | 0%      | 14%      | 14%     | 29%  | 43%         |
| Circuit Protection             | 0%     | 0%      | 14%      | 29%     | 14%  | 43%         |
| Rectangular                    | 0%     | 0%      | 17%      | 17%     | 17%  | 50%         |
| Inductors                      | 0%     | 0%      | 14%      | 57%     | 14%  | 14%         |
| Resistors                      | 0%     | 0%      | 14%      | 43%     | 14%  | 29%         |
| Sensors                        | 0%     | 0%      | 13%      | 25%     | 25%  | 38%         |
| Timing                         | 0%     | 13%     | 13%      | 38%     | 13%  | 25%         |
| Transformers, Filters, Ferrite | 0%     | 0%      | 13%      | 38%     | 13%  | 38%         |
| Overall Average                | 0%     | 2%      | 14%      | 32%     | 17%  | 35%         |



## Figure 9 – Supply Disruption Recovery – Passives



Source: ECIA

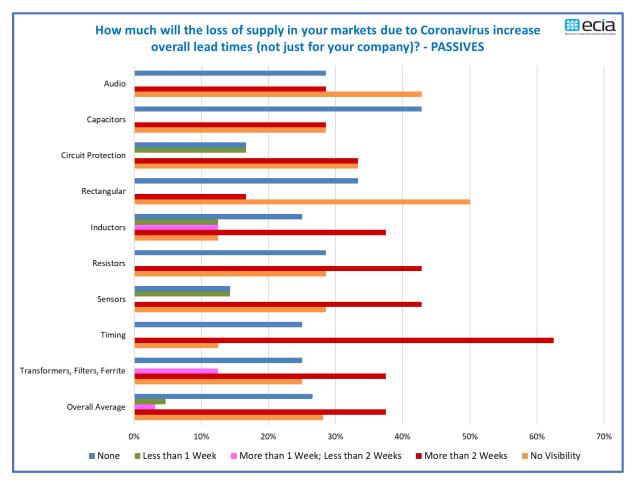
#### Table 5 – Supply Disruption Recovery – Passives

How long do you believe your ability to supply customers will be disrupted due to the Coronavirus?

| Until February                 |               |     |                |                | Until May and  |        |             |  |
|--------------------------------|---------------|-----|----------------|----------------|----------------|--------|-------------|--|
| COMPONENT                      | No Disruption | 29  | Until March 15 | Until March 31 | Until April 30 | Beyond | Do Not Know |  |
| Audio                          | 29%           | 14% | 14%            | 0%             | 0%             | 0%     | 43%         |  |
| Capacitors                     | 43%           | 0%  | 14%            | 14%            | 0%             | 0%     | 29%         |  |
| Circuit Protection             | 29%           | 0%  | 29%            | 14%            | 0%             | 0%     | 29%         |  |
| Rectangular                    | 33%           | 0%  | 17%            | 0%             | 0%             | 0%     | 50%         |  |
| Inductors                      | 29%           | 14% | 14%            | 0%             | 0%             | 0%     | 43%         |  |
| Resistors                      | 29%           | 0%  | 14%            | 14%            | 0%             | 14%    | 29%         |  |
| Sensors                        | 14%           | 14% | 14%            | 14%            | 0%             | 0%     | 43%         |  |
| Timing                         | 25%           | 0%  | 25%            | 25%            | 0%             | 0%     | 25%         |  |
| Transformers, Filters, Ferrite | 38%           | 0%  | 25%            | 13%            | 0%             | 0%     | 25%         |  |
| Overall Average                | 30%           | 5%  | 19%            | 11%            | 0%             | 2%     | 34%         |  |



## Figure 10 – Lead Time Impact Average – Passives



Source: ECIA

### Table 6 – Lead Time Impact Average – Passives

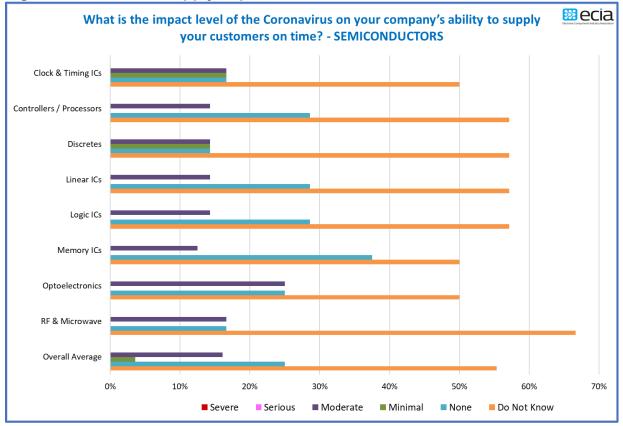
How much will the loss of supply in your markets due to Coronavirus increase overall lead times (not just for your company)?

| COMPONENT                      | None | Less than 1<br>Week | More than 1<br>Week; Less<br>than 2 Weeks | More than 2<br>Weeks | No Visibility |
|--------------------------------|------|---------------------|---|----------------------|---------------|
| Audio                          | 29%  | 0%                  | 0%  | 29%                  | 43%           |
| Capacitors                     | 43%  | 0%                  | 0%  | 29%                  | 29%           |
| Circuit Protection             | 17%  | 17%                 | 0%  | 33%                  | 33%           |
| Rectangular                    | 33%  | 0%                  | 0%  | 17%                  | 50%           |
| Inductors                      | 25%  | 13%                 | 13%                                       | 38%                  | 13%           |
| Resistors                      | 29%  | 0%                  | 0%  | 43%                  | 29%           |
| Sensors                        | 14%  | 14%                 | 0%  | 43%                  | 29%           |
| Timing                         | 25%  | 0%                  | 0%  | 63%                  | 13%           |
| Transformers, Filters, Ferrite | 25%  | 0%                  | 13%                                       | 38%                  | 25%           |
| Overall Average                | 27%  | 5%                  | 3%  | 38%                  | 28%           |



# **Semiconductors Survey Results**

#### Figure 11 – On Time Supply Impact – Semiconductors



Source: ECIA

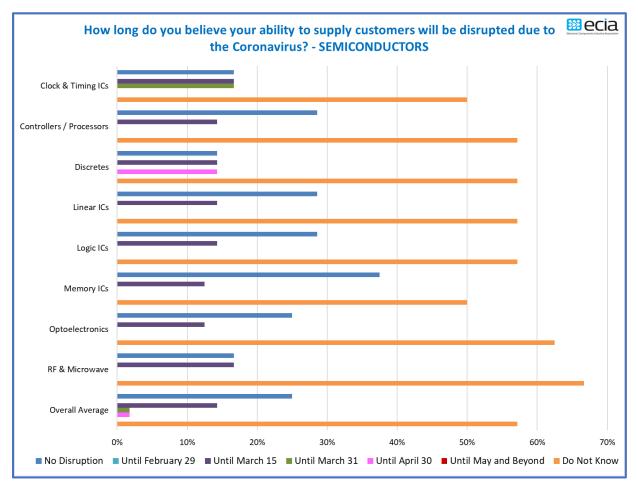
## Table 7 – On Time Supply Impact – Semiconductors

What is the impact level of the Coronavirus on your company's ability to supply your customers on time?

| COMPONENT                | Severe | Serious | Moderate | Minimal | None | Do Not Know |
|--------------------------|--------|---------|----------|---------|------|-------------|
| Clock & Timing ICs       | 0%     | 0%      | 17%      | 17%     | 17%  | 50%         |
| Controllers / Processors | 0%     | 0%      | 14%      | 0%      | 29%  | 57%         |
| Discretes                | 0%     | 0%      | 14%      | 14%     | 14%  | 57%         |
| Linear ICs               | 0%     | 0%      | 14%      | 0%      | 29%  | 57%         |
| Logic ICs                | 0%     | 0%      | 14%      | 0%      | 29%  | 57%         |
| Memory ICs               | 0%     | 0%      | 13%      | 0%      | 38%  | 50%         |
| Optoelectronics          | 0%     | 0%      | 25%      | 0%      | 25%  | 50%         |
| RF & Microwave           | 0%     | 0%      | 17%      | 0%      | 17%  | 67%         |
| Overall Average          | 0%     | 0%      | 16%      | 4%      | 25%  | 55%         |



### Figure 12 – Supply Disruption Recovery – Semiconductors



Source: ECIA

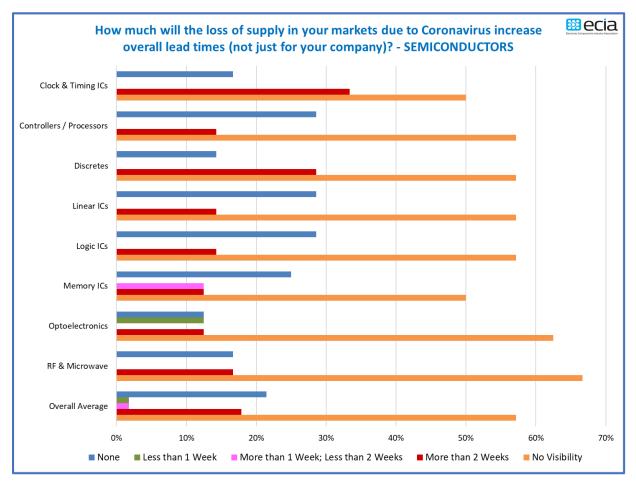
## Table 8 – Supply Disruption Recovery – Semiconductors

How long do you believe your ability to supply customers will be disrupted due to the Coronavirus?

|                          | Until February |    |                |                |                | Until May and |             |  |
|--------------------------|----------------|----|----------------|----------------|----------------|---------------|-------------|--|
| COMPONENT                | No Disruption  | 29 | Until March 15 | Until March 31 | Until April 30 | Beyond        | Do Not Know |  |
| Clock & Timing ICs       | 17%            | 0% | 17%            | 17%            | 0%             | 0%            | 50%         |  |
| Controllers / Processors | 29%            | 0% | 14%            | 0%             | 0%             | 0%            | 57%         |  |
| Discretes                | 14%            | 0% | 14%            | 0%             | 14%            | 0%            | 57%         |  |
| Linear ICs               | 29%            | 0% | 14%            | 0%             | 0%             | 0%            | 57%         |  |
| Logic ICs                | 29%            | 0% | 14%            | 0%             | 0%             | 0%            | 57%         |  |
| Memory ICs               | 38%            | 0% | 13%            | 0%             | 0%             | 0%            | 50%         |  |
| Optoelectronics          | 25%            | 0% | 13%            | 0%             | 0%             | 0%            | 63%         |  |
| RF & Microwave           | 17%            | 0% | 17%            | 0%             | 0%             | 0%            | 67%         |  |
| Overall Average          | 25%            | 0% | 14%            | 2%             | 2%             | 0%            | 57%         |  |



## Figure 13 – Lead Time Impact Average – Semiconductors



Source: ECIA

## Table 9 – Lead Time Impact Average – Semiconductors

How much will the loss of supply in your markets due to Coronavirus increase overall lead times (not just for your company)?

|                          |      | Less than 1 | More than 1<br>Week; Less | More than 2 |               |
|--------------------------|------|-------------|---------------------------|-------------|---------------|
| COMPONENT                | None | Week        | than 2 Weeks              | Weeks       | No Visibility |
| Clock & Timing ICs       | 17%  | 0%          | 0%                        | 33%         | 50%           |
| Controllers / Processors | 29%  | 0%          | 0%                        | 14%         | 57%           |
| Discretes                | 14%  | 0%          | 0%                        | 29%         | 57%           |
| Linear ICs               | 29%  | 0%          | 0%                        | 14%         | 57%           |
| Logic ICs                | 29%  | 0%          | 0%                        | 14%         | 57%           |
| Memory ICs               | 25%  | 0%          | 13%                       | 13%         | 50%           |
| Optoelectronics          | 13%  | 13%         | 0%                        | 13%         | 63%           |
| RF & Microwave           | 17%  | 0%          | 0%                        | 17%         | 67%           |
| Overall Average          | 21%  | 2%          | 2%                        | 18%         | 57%           |