Introduction

The Coronavirus / COVID-19 pandemic has reached every corner of the world and significantly disrupted markets and supply chains in every country. (See Figure 1) The extreme uncertainty and volatility associated with this crisis as created a need for visibility on how this crisis is impacting the electronics components industry and the supply chain. In order to provide important visibility, ECIA began conducting surveys of member manufacturing and distributor companies at the start of February to gain an understanding of this ever-evolving situation. ECIA has published survey results on a bi-weekly basis in an attempt to provide continuous updates to our members.

This most recent survey was conducted between Monday, April 13th and Monday, April 20th. Between the most recent survey and the previous survey that ended April 6th the number of confirmed cases worldwide has grown by over 1.1 million people and deaths due to COVID-19 nearly doubled. Pressure to start easing quarantine orders is growing as a staggering number of workers have lost their jobs and unemployment claims have smashed records as the economic impact of the pandemic sweeps around the world. A sense of urgency to reopen the economy continues to build as initial funds in an unprecedented stimulus package approved by the U.S. government deigned to rescue a wide range of industries and businesses were quickly depleted. While it appears agreement has been reached between political parties in the U.S. on another major round of government funding, worry is growing that the economy risks slipping into a depression if a return to renewed economic activity does not begin reasonably soon.

The survey ended April 20th reflects a significant renewal in concern regarding supply chain impacts and end-market destruction due to COVID-19. This growing pessimism by survey respondents is broad-based across component categories, market segments and stages of the supply chain. While concerns related to raw material supply disruption declined notably, the number of respondents seeing a serious or severe impact on the electronics components production and end-market losses jumped by 12% and 11% respectively between the previous and most recent survey. Expectation regarding the loss of end-market demand grew the greatest in the consumer electronics segment as those anticipating a decline jumping to 50% of respondents. The Automotive and Industrial Electronics markets continuing to represent the segments of greatest concern with expectations of a decline growing to 62% and 60% respectively. Despite expectations for weak end-market demand, the confidence in order backlog remains quite strong across the board.

Multiple areas of the economy continue to show increased stress with oil markets becoming the most recent headline grabber as prices collapse amid a glut created by a combination of evaporating demand and surging supply. Governments around the world and in major regions and localities continue to combat this pandemic and deliver daily reports on patients, deaths, scientific initiatives, medical equipment/supply production, public protection orders, economic repair legislation, etc.
The full report provides detailed data by component type for the major categories of:
- Electro-Mechanical
- Passives
- Semiconductors

The complete report presents data in 15 detailed tables and 24 figures. In addition, this report has added indexes for the first time to provide a perspective on how sentiment has shifted over time.

**Market and Supply Chain Impact**

As noted above there is a dichotomy between expectations for end-market demand and confidence in bookings backlogs. Consumer electronics now joins industrial and automotive electronics with more than 50% expecting a decline in market demand. However, reduced confidence on order backlogs related to these markets is only around 20%. Medical electronics and defense/aerospace demand continue to reflect is expectations for a strong increase. The latest results on the question about the impact of government quarantine orders and directives on a company’s workforce and operations show a significant increase in disruption. For the first time 11% reported severe disruptions in operations and serious disruption reports jumped from 17% to 26%. Only 5% have seen no impact on their operations or workforce.

**Figure 1 – Operations and Workforce Impact**

![Graph showing the impact of government quarantine orders and directives on workforce and operations](source: ECIA)
Top Level Averages and Indexes

The supply chain impact index saw significant reductions in concern related to raw material supply and systems manufacturing while other stages of the supply show increased concern.

Figure 2 – Index of Supply Chain Concerns

Source: ECIA
Figure 3 – On Time Supply Impact Average on Top Level Categories

**What is the impact level of the Coronavirus / COVID-19 on your company’s ability to supply your customers on time? - CATEGORY AVERAGE**

- **Electro-Mechanical Average (4/20/20)**
- **Electro-Mechanical Average (4/6/20)**
- **Electro-Mechanical Average (3/20/20)**
- **Passives Average (4/20/20)**
- **Passives Average (4/6/20)**
- **Passives Average (3/20/20)**
- **Semiconductors Average (4/20/20)**
- **Semiconductors Average (4/6/20)**
- **Semiconductors Average (3/20/20)**

0% 10% 20% 30% 40% 50% 60%

- Severe
- Serious
- Moderate
- Minimal
- None
- Do Not Know

Source: ECIA