Chipmakers Cypress Semiconductor and Spansion announced plans to merge Monday in a $4 billion deal bringing together two key makers of components for "Internet of Things" devices.

The all-stock deal brings together Cypress, which is known for chips controlling touchscreen devices, and Spansion, a major maker of chips for the automotive and industrial control market.

"This merger represents the combination of two smart, profitable, passionately entrepreneurial companies that are number one in their respective memory markets and have successfully diversified into embedded processing," said T.J. Rodgers, the Cypress founding president who will be chief executive of the new group.

Spansion shareholders will receive 2.457 Cypress shares for each share they own, resulting in shareholders of each company holding 50 percent of the post-merger company.