

# SAMSUNG

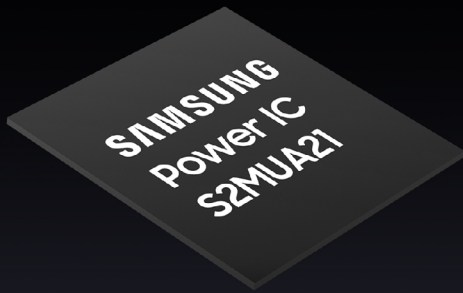
## Product brief

Efficiently powering mobile innovation

# S2MUA21 Power IC

## Highlights

A small BOM size with space savings of up to 66%  
Highly efficient wired & wireless charging  
Versatile due to comprehensive power functions for cradles



### Powering all types of cradles

The S2MUA21 provides a power feature that cradles need most. With the most popular eFlash size on MCU, its wired and wireless charging functions can be applied to most cradles on the market. This feature could make multiple TWS lineups possible.

### A small BOM size

The S2MUA21 duplicates the functions of 10 discrete components, saving up to 66% of the area compared to a discrete solution. The overall design of cradles could be more flexible as a result.

### Highly efficient wired & wireless charging

The S2MUA21 boasts highly efficient wired and wireless charging. Over 90% of the wired charging could help the cradle get recharged instantaneously, while wireless charging – with up to 70% efficiency – makes wires unnecessary.

### Versatility for wide range of applications

The S2MUA21 performs a wide range of functions. On top of the IC's main functions – wired & wireless charging – the IC could also operate a fuel gauge, or power line communications and LED controls.

# Specifications

	S2MUA21 Power IC
MCU	Cortex <sup>®</sup> -M0, 32kb eFlash, 4kb SRAM
Wired Charging	5V/1.0A
Wireless Charging	5V/1.0A
Fuel Gauge	12-bit ADC
PLC	Available (GPIO)
Size	5mm x 5mm
PKG	40-QFN

\* All product specifications reflect internal test results and are subject to variations by user's system configuration. Actual performance may vary depending on use conditions and environment.

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