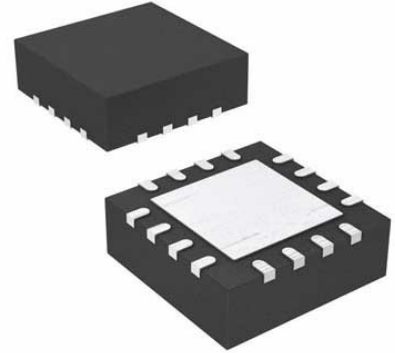


Switching Controllers 75V DC-DC Buck Controller with HSC

Manufacturers	<a href="#">Microchip Technology, Inc</a>
Package/Case	VQFN-16
Product Type	Power Management ICs
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for MIC2104YML-TR or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The MIC2103/04 are constant-frequency, synchronous buck controllers featuring a unique adaptive ON-time control architecture. The MIC2103/04 operates over an input supply range from 4.5V to 75V and can be used to supply up to 15A of output current. The output voltage is adjustable down to 0.8V with a guaranteed accuracy of  $\pm 1\%$ . The device operates with programmable switching frequency from 200kHz to 600kHz. Hyper Light Load™ architecture provides the same high-efficiency and ultra fast transient response as the Hyper Speed Control architecture under the medium to heavy loads, but also maintains high efficiency under light load conditions by transitioning to variable frequency, discontinuous-mode operation.

The MIC2103/04 offers a full suite of protection features to ensure protection of the IC during fault conditions. These include under-voltage lockout to ensure proper operation under power-sag conditions, internal soft-start to reduce inrush current, fold-back current limit, "hiccup" mode short-circuit protection and thermal shutdown.

## Features

Hyper Speed Control™ architecture enables

High delta V operation (V>

Any Capacitor™ stable

4.5V to 75V input voltage

0.8V Reference Voltage with ±1% accuracy

200kHz to 600kHz, programmable switching frequency

Hyper Light Load Control (MIC2103 only)

Hyper Speed Control (MIC2104 only)

Enable input, Power-Good output

Built-in 5V regulator for single-supply operation

Programmable current limit and fold-back "hiccup" mode short-circuit protection

5ms internal soft-start, internal compensation, and thermal shutdown

Supports safe start-up into a pre-biased output

## Related Products



### [MIC94325YMT-TR](#)

Microchip Technology, Inc  
UDFN-6



### [MIC4684YM](#)

Microchip Technology, Inc  
SOIC-8



### [MIC2009A-1YM6-TR](#)

Microchip Technology, Inc  
SOT-23-6



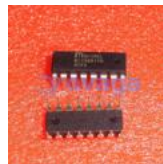
### [MIC2090-1YM5-TR](#)

Microchip Technology, Inc  
SOT-23-5



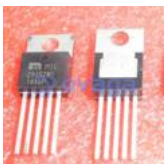
### [MIC5841YWM-TR](#)

Microchip Technology, Inc  
SOIC-18



### [MIC5891YN](#)

Microchip Technology, Inc  
PDIP-16



### [MIC29152WT](#)

Microchip Technology, Inc  
TO-220-5



### [MIC5209YM](#)

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SOIC-8