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#### THE ULTIMATE MOTOR DRIVER SOLUTION FOR MODERN SMART LOCKS

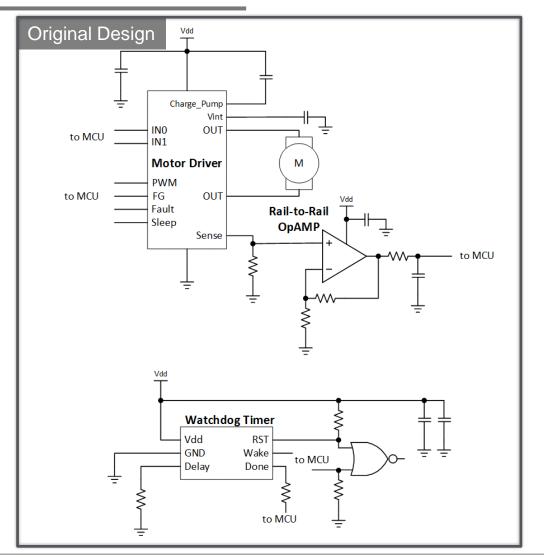
<u>HVPAK</u> (up to 26.4 V and 3 A per OUT) takes its roots from the <u>GreenPAK family</u> featuring its configurability and free GUI-based <u>software</u> to design the circuit without any programming language needed. It combines mixed-signal logic and high-voltage H-/Half-bridge functionality in a tiny 2 mm x 3 mm QFN package.

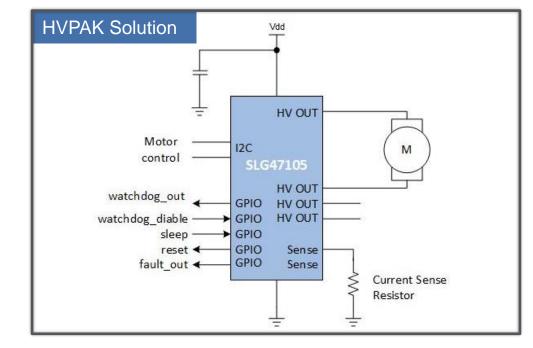
The HVPAK incorporates advanced PWM macrocells, enabling the simultaneous control of multiple motors with varying PWM frequencies and duty cycles. Its compact size and low idle current consumption make it highly versatile, expanding its range of potential applications. This tiny and thermally-efficient IC provides an ideal platform for designing mixed-signal functions alongside its high-voltage capabilities.

|   | Secure system stability           | •            | Programmable Motion Profile   | Datasheet<br>SLG47105                 | Datasheet<br>SLG47115             |
|---|-----------------------------------|--------------|-------------------------------|---------------------------------------|-----------------------------------|
| - | by reducing motor peak current    | •            | Smaller board space           |                                       |                                   |
|   | (soft start)                      | $\mathbf{D}$ | Low current consumption       | Download<br>Go Configure™             | HVPAK<br>Application Notes        |
|   | Increased operating voltage range |              | – 30 nA sleep current         | Software Hub                          |                                   |
|   | Flexible/Programmable             | •            | Built-in MOSFETs              |                                       | Winning Combo:<br>Smart Lock with |
|   | motor control                     | •            | Constant motor speed feature  | Winning Combo:<br>Wireless Smart Door | Super-Low Power                   |
| • | Programmable Reset Timing         | •            | Current limit control feature | Lock                                  | Wi-Fi and Bluetooth<br>Low Energy |

#### RENESAS

## HVPAK APPROACH: SMART LOCK DESIGN





Design reduced by:

- 4 ICs
- 14 passive components
- reduced current consumption by four times (idle mode)

| Value        | Approx. savings with HVPAK |
|--------------|----------------------------|
| Layout Size  | <mark>17.8 mm²</mark>      |
| Cost Savings | <mark>\$ 1.33</mark>       |

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