



### Description

The SAMPLEKITVNH7 provides you a selection of ST VIPower M0-7 HBridge drivers representative of the entire family useful for evaluating and promoting the product family.

### Features

- Immediate evaluation of M0-7 HBridge drivers with demonstration examples
- The Kit includes:
  - 8 samples
  - Printed card providing overview of product portfolio, key features, main applications, package description.

**Table 1. Device summary**

Part number	RON (High- and low-side) (mOhm)	Package
VNH7100BAS	60-40	SO-16N
VNH7070BAS	42-30	SO-16N
VNH7070AY	42-30	PowerSSO-36 Triple Pad
VNH7040AY	27-14	PowerSSO-36 Triple Pad
VNHD7012AY	12	PowerSSO-36
VNHD7008AY	8	PowerSSO-36

# 1 Overview

The ST VIPower M0-7 HBridge is a family of bridge motor drivers intended for a wide range of automotive applications. The family is designed using STMicroelectronics' well known and proven proprietary VIPower<sup>®</sup> technology that allows to efficiently integrate on the same die the true PowerMOSFET with an intelligent signal/ protection circuitry. The devices are housed in tiny packages SO-16N, PowerSSO-36 single and Triple Pad packages able to optimize the dissipation performances. The input signals INA and INB can directly interface the microcontroller to select the motor direction and the brake conditions. Two selection pins (SEL0 and SEL1) are available to address to the microcontroller the information available on the MultiSense. The MultiSense pin allows to monitor the motor current, provides a voltage proportional to the battery value and the information on the temperature of the chip. The integrated protections are: load current limitation, overload active power limitation (with latch-off), overtemperature shutdown (with latch-off) and cross current protection. The PWM, up to 20 KHz, allows to control the speed of the motor in all possible conditions.

## 2 Ordering information

Table 2. Order code

Order code	Reference
SAMPLEKITVNH7	M0-7 HBridge drivers Sample kit box

### 3 Revision history

Table 3. Document revision history

Date	Revision	Changes
05-Mar-2019	1	Initial release.
15-Mar-2019	2	Typo error.

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