



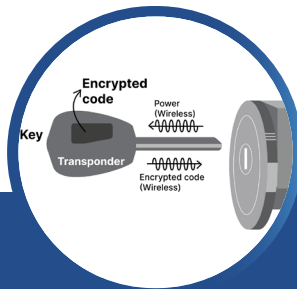
## AUTOMOTIVE TRANSPONDER

Silicon Craft Technology PLC (SIC) presents a broad range of compatible automotive transponders with superior performance and reliability, extensively supporting a wide variety of automotive applications.

Experience uninterrupted use with SIC transponders, AEC-Q100 certified for reliable operations.



Fully compatible with OEM



Superior read-range



High-reliability circuit and packaging

# AUTOMOTIVE TRANSPONDER PORTFOLIO

## SIC6146-6H/BN/EN, SIC6147, SIC614A, SIC6149

### SPECIFICATIONS

|                         | SIC6146-6H  | SIC6146-BN  | SIC6146-EN                 | SIC6147  | SIC614A  | SIC6149                                      |
|-------------------------|---|---|----------------------------|--|--|--|
| COMPATIBILITY           | ID46  | ID46+EE <sup>*1</sup>   | ID46 Ext <sup>*1</sup>     | ID49-1C, ID47  | ID4A   | ID49 <sup>*1</sup>                           |
| SECURITY ALGORITHM      | 48-bit / H2<br>32-bit password                                      | 48-bit / H2   |                            | 96-bit / H3  | 128-bit / H-AES                                | 128-bit / H-Pro                              |
| TECHNOLOGY              | FDX   |   |                            |  |  |  |
| FREQUENCY               | 125 kHz   |   |                            |  |  |  |
| DOWNLINK PROTOCOL       | ASK   |   |                            |  |  |  |
| UPLINK PROTOCOL         | ASK Manchester and Bi-phase with RF/32 data rate                    |   |                            |  |  |  |
| EEPROM MEMORY SIZE      | 256-bit   | 4096-bit  |                            |  |  |  |
| UNIQUE ID               | 32-bit  |   |                            |  |  |  |
| USER MEMORY             | 128-bit   | 128-bit /<br>Ext. 3840-bit  | 128-bit /<br>Ext. 3584-bit | 96-bit /<br>Ext. 3584-bit  | 64-bit /<br>Ext. 3584-bit                      | 64-bit /<br>Ext. 3584-bit                    |
| FORM FACTOR             | Wedge   |   |                            |  |  |  |
| CAR BRAND <sup>*2</sup> | Honda, BMW, Nissan,<br>Hyundai, Chevrolet,<br>Kia, Citroen, Peugeot | Honda, BMW, Nissan,<br>Hyundai, Chevrolet,<br>Citroen, Kia, Peugeot | Chevrolet, Opel, GMC       | Honda, Hyundai, Fiat,<br>Mitsubishi, Suzuki,<br>Acura, Jeep, Renault | Nissan, Honda, Infiniti,<br>Jeep, Kia, Hyundai | BMW, Chevrolet, Mini<br>Cooper, Ford, Toyota |

## SIC614C/D/E, SIC618A, SIC61T5, SIC6148, SIC6188, SIC618C

### SPECIFICATIONS

|                         | SIC614C  | SIC614D                                      | SIC614E       | SIC618A                                   | SIC61T5  | SIC6148  | SIC6188                           | SIC618C   |
|-------------------------|--|--|---------------|---|--|--|-----------------------------------|---|
| COMPATIBILITY           | ID4C <sup>*1</sup>                               | ID4D   | ID4E,<br>ID64 | ID7A,<br>ID8A                             | T5   | ID48   | ID88,<br>MQB48 <sup>*1</sup>      | ID8C, TEMIC   |
| SECURITY ALGORITHM      | Fixed Code                                       | 40-bit / D40<br>80-bit / D80                 | 40-bit / D40  | 128-bit / D-AES                           | Fixed Code   | 96-bit / M2  | 128-bit / M-AES<br>96-bit / M2    | 128-bit / AUT64   |
| TECHNOLOGY              | HDX  |  |               |   | FDX  |  |                                   |   |
| FREQUENCY               | 134.2 kHz  |  |               |   | 125 kHz  |  |                                   |   |
| DOWNLINK PROTOCOL       | ASK  |  |               |   |  |  |                                   |   |
| UPLINK PROTOCOL         | FSK uplink at 134kHz/123kHz with RF/16 data rate |  |               |   | ASK Manchester and<br>Bi-phase with RF/32,<br>RF/40, RF/64 data rate | ASK Manchester<br>and Bi-phase with<br>RF/32 data rate |                                   | ASK Manchester and<br>Bi-phase with RF/32,<br>RF/64 data rate |
| EEPROM MEMORY SIZE      | 80-bit   | 552-bit                                      | 88-bit        | 3072-bit                                  | 160-bit  | 256-bit  | 2048-bit                          | 320-bit   |
| UNIQUE ID               | 80-bit programmable ID                           | 24-bit serial number 8-bit manufacturer code |               | 64-bit/128-bit<br>programmable ID         | 32-bit   | 32-bit unique ID1<br>32-bit unique ID2                 | 64-bit/128-bit<br>programmable ID |   |
| USER MEMORY             | 80-bit   | 336-bit                                      | 8-bit         | 112-bit /<br>Ext. 1920-bit                | 128-bit  | 94-bit   | 94-bit /<br>Ext. 1024-bit         | 128-bit   |
| FORM FACTOR             | Wedge  |  |               |   |  | Glass Tag  | Wedge                             |   |
| CAR BRAND <sup>*2</sup> | Ford, Lexus, Mitsubishi,<br>Toyota, Hyundai      | Ford, Toyota, Kia<br>Hyundai                 | Chrysler      | Toyota, Subaru, Scion<br>Citroen, Peugeot | Fiat, Audi, Honda  | Volkswagen, Audi                                       | Audi, Seat, Skoda,<br>Volkswagen  | Mazda, Proton   |

## INFORMATION

\*1 Please contact our support team for further product information

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