

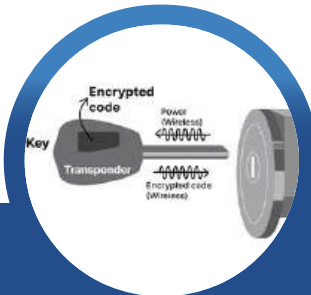


AUTOMOTIVE TRANSPONDER

Silicon Craft 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 our transponders manufactured **AEC-Q100 certified** product line.



Fully Compatible with OEM



Superior Read Range



High-Reliability Circuit
and Packaging

AUTOMOTIVE TRANSPONDER PORTFOLIO

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

SPECIFICATION	SIC6146-6H	SIC6146-BN	SIC6146-EN	SIC6147	SIC614A	SIC6149
Compatibility	ID46	ID46+EE ^{*1}	ID46 Ext ^{*1}	ID49-1C, ID47	ID4A	ID49 ^{*1}
Security Algorithm	48-bit / H2 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	4,096-bit				
Unique ID	32-bit					
User Memory	128-bit	128-bit / Ext. 3,840-bit	128-bit / Ext. 3,584-bit	96-bit / Ext. 3,584-bit	64-bit / Ext. 3,584-bit	
Form Factor	Wedge					
Car Brand ^{*2}	Honda, BMW, Nissan, Hyundai, Chevrolet, Kia, Citroen, Peugeot	Honda, BMW, Nissan, Hyundai, Chevrolet, Citroen, Kia, Peugeot	Chevrolet, Opel, GMC	Honda, Hyundai, Fiat, Mitsubishi, Suzuki, Acura, Jeep, Renault	Nissan, Honda, Infiniti, Jeep, Kia, Hyundai	BMW, Chevrolet, Mini Cooper, Ford, Toyota

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

SPECIFICATION	SIC614C	SIC614D	SIC614E	SIC618A	SIC61T5	SIC6148	SIC6188	SIC618C
Compatibility	ID4C ^{*1}	ID4D	ID4E, ID64	ID7A, ID8A	T5	ID48	ID88, MQB48 ^{*1}	ID8C,TEMIC
Security Algorithm	Fixed Code	40-bit / D40 80-bit / D80	40-bit / D40	128-bit / D-AES	Fixed Code	96-bit / M2	128-bit / M-AES 96-bit / M2	128-bit / AUT64
Technology	HDX				FDX			
Frequency	134.2 kHz				125 kHz			
Downlink Protocol	ASK							
Uplink Protocol	FSK Uplink at 134 kHz / 123 kHz with RF/16 Data Rate				ASK Manchester and Bi-Phase with RF/32, RF/40, RF/64 Data Rate	ASK Manchester and Bi-Phase with RF/32 Data Rate		ASK Manchester and Bi-Phase with RF/32, RF/64 Data Rate
EEPROM Memory Size	80-bit	552-bit	88-bit	3,072-bit	160-bit	256-bit	2,048-bit	320-bit
Unique ID	80-bit Programmable ID	24-bit Serial Number 8-bit Manufacturer Code			64-bit/128-bit Programmable ID	32-bit	32-bit Unique ID 1 32-bit Unique ID 2	64-bit/128-bit Programmable ID
User Memory	80-bit	336-bit	8-bit	112-bit / Ext. 1,024-bit	128-bit	94-bit	94-bit / Ext. 1,024-bit	128-bit
Form Factor	Wedge					Glass Tag	Wedge	
Car Brand ^{*2}	Ford, Lexus,Mitsubishi, Toyota, Hyundai	Ford, Toyota, Kia Hyundai	Chrysler	Toyota, Subaru, Scion Citroen, Peugeot	Fiat, Audi, Honda	Volkswagen, Audi	Audi, Seat, Skoda, Volkswagen	Mazda, Proton

INFORMATION

^{*1} Please contact our support team for further product information.

^{*2} Silicon Craft Technology PLC does not hold intellectual property rights or licenses for the vehicle brands, transponders, or commercial names mentioned in this document. These brands and names are used solely for product communication purposes.