

DRAFT SHORT DATA SHEET: NXP.J3D081 Dual Interface with P5CD081 - MoTechno product# NXP.J3D081.DI  
 DRAFT SHORT DATA SHEET: NXP.J3D081 Contact-less with P5CD081 - MoTechno product# NXP.J3D081.CL

<http://www.motechno.com/javacard3.0.html> MoTechno product# NXP.J3D081.DI  
<http://www.motechno.com/rfid-javacard3.0.html> MoTechno product# NXP.J3D081.CL

JCOP version: JCOP v2.4.2 R2

#### Specifications & features

JAVA CARD version 3.0.1 Classic  
 GlobalPlatform 2.2  
 SCP SCP02 (default) / 01 / 03 (project based)  
 Delegated management Yes  
 Secure box Yes

#### Available memory size and technology

EEPROM (KByte) 80  
 CMOS technology CMOS14

#### Implemented MIFARE options:

MIFARE Classic 1K / 4K / no MIFARE -  
 MIFARE FleXTM with MIFARE Classic 4K -  
 MIFARE DESFire EV1 8K Yes

#### eGovernment and banking performance

BAC (20 kByte read) ask for an NDA (Info@MoTechno.com)  
 EAC (36 kByte read) ask for an NDA (Info@MoTechno.com)  
 MasterCard PayPass M/Chip4 (performance comparison) ask for an NDA (Info@MoTechno.com)

#### Cryptography

DES/TDES [bit] 56/112/168  
 AES [bit] 256  
 RSA [bit] 2048  
 ECC GF(p) [bit] 320  
 Point Addition (PACE) Yes  
 SHA SHA-1/2

#### Certifications and approvals

EMVCo hardware approval Yes  
 EMVCo platform approval Yes  
 VISA approvals Yes  
 MasterCard PIC (TAS & CAST) Yes  
 Common Criteria (VAN5) EAL 4+ with DESFire option

Requests for customized ATR are welcome.

Standard cards initiated with the following standard ATR:

3B F9 13 00 00 81 31 FE 45 4A 43 4F 50 32 34 32 52 32 A3

#### ATR-Details:

Initial character:

TS = 3B --> Using Direct Convention

Format byte:

T0 = F9

- Y1 = 0F --> Interface Bytes Transmitted: TA1 TB1 TC1 TD1

- K = 09 --> # Historical Bytes = 9

Interface bytes:

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TA1 = 13
- Fi / Di = 372 / 4 : Baud rate at 3.5712 MHz = 38400 bps
TB1 = 00
- VPP is not electrically connected
TC1 = 00
- Extra guard time integer (N) = 0
TD1 = 81
- Y1 + 1 = 08 --> Interface Bytes Transmitted: TD2
- Protocol T = 1
TD2 = 31
- Y2 + 1 = 03 --> Interface Bytes Transmitted: TA3 TB3
- Protocol T = 1
TA3 = FE
- IFSC : 254
TB3 = 45
- BWI = 4 , CWI = 5
Historical bytes: 4A 43 4F 50 32 34 32 52 32
Check Byte:
TCK = A3
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(Related products:

<a href="http://www.mot techno.com/javacard-3.0.html">http://www.mot techno.com/javacard-3.0.html</a>	MoTechno product#	NXP.J2E145.C
<a href="http://www.mot techno.com/jcop21.0.html">http://www.mot techno.com/jcop21.0.html</a>	MoTechno product#	NXP.J2A080.C
<a href="http://www.mot techno.com/jcop-sim-card.0.html">http://www.mot techno.com/jcop-sim-card.0.html</a>	MoTechno product#	NXP.J2A080.SIM
<a href="http://www.mot techno.com/jcop31.0.html">http://www.mot techno.com/jcop31.0.html</a>	MoTechno product#	NXP.J3A080.DI
<a href="http://www.mot techno.com/ibm-java-card-jcop.0.html">http://www.mot techno.com/ibm-java-card-jcop.0.html</a>	MoTechno product#	NXP.J3A081.DI
<a href="http://www.mot techno.com/jcop41.0.html">http://www.mot techno.com/jcop41.0.html</a>	MoTechno product#	NXP.JCOP41.TI)

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This draft document may be not used if a more recent version is available:

<http://www.mot techno.com/fileadmin/driver/cardreader/J3D081-JCOP2.4.2.pdf>

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