

## AKD Profinet Parameter Access Byte Descriptions

9/5/2017 Jimmy Coleman

### Read Parameter Request (from PLC to drive)

Byte	Description	Data Size	Allowable Values	Typical Value
0	Request Reference	Unsigned 8 bit	0x00 is reserved; 0x01 - 0xFF	Defined by PLC
1	Request ID	Unsigned 8 bit	0x01 Read	Always 0x01
2	Axis #	Unsigned 8 bit	0x00 only (AKD Parameter Manager)	Always 0x00
3	No. of Parameters	Unsigned 8 bit	0x01 - 0x27	0x01
4	Attribute	Unsigned 8 bit	0x00 reserved; 0x10 Value; 0x20 Description	Always 0x10
5	No. of Elements	Unsigned 8 bit	0x01 - 0xEA	0x01
6	PNU Number - upper 8 bits	Unsigned 8 bit	0x01 - 0xFF	PNU
7	PNU Number - lower 8 bits	Unsigned 8 bit	0x01 - 0xFF	PNU
8	Subindex - upper 8 bits	Unsigned 8 bit	0x00 only, except for free mapping telegram 400	0x00
9	Subindex - lower 8 bits	Unsigned 8 bit	0x00 only, except for free mapping telegram 400	0x00

### Read Parameter Response (from drive to PLC)

Byte	Description	Data Size	Allowable Values	Typical Value
0	Request Reference	Unsigned 8 bit	0x00 is reserved; 0x01 - 0xFF	
1	Response ID	Unsigned 8 bit	0x01 Read successful or 0x81 Unsuccessfull	0x01
2	Axis #	Unsigned 8 bit	0x00 only (AKD Parameter Manager)	Always 0x00
3	No. of Parameters	Unsigned 8 bit	0x01 - 0x27	0x01
4	Attribute	Unsigned 8 bit	0x00 reserved; 0x10 Value; 0x20 Description	Always 0x10
5	No. of Elements	Unsigned 8 bit	0x01 - 0xEA	0x01
6	PNU Number - upper 8 bits	Unsigned 8 bit	0x01 - 0xFF	PNU number
7	PNU Number - lower 8 bits	Unsigned 8 bit	0x01 - 0xFF	PNU number
8	Subindex - upper 8 bits	Unsigned 8 bit	0x00 only, except for free mapping telegram 400	0x00
9	Subindex - lower 8 bits	Unsigned 8 bit	0x00 only, except for free mapping telegram 400	0x00
10	Format	Unsigned 8 bit	0x41 for byte; 0x42 for Word; 0x43 for Dword; 0x00 for no data	0x41, 0x42, or 0x43
11	Number of Values	Unsigned 8 bit	0x01	0x01
12	Data - Most significant	Signed 8 bit	0x01 - 0xFF	Data
13	Data	Unsigned 8 bit	0x01 - 0xFF	Data
14	Data	Unsigned 8 bit	0x01 - 0xFF	Data
15	Data - Least significant	Unsigned 8 bit	0x01 - 0xFF	Data

Write Parameter Request (from PLC to drive)

Byte	Description	Data Size	Allowable Values	Typical Value
0	Request Reference	Unsigned 8 bit	0x00 is reserved; 0x01 - 0xFF	Defined by PLC
1	Request ID	Unsigned 8 bit	0x02 Write	Always 0x01
2	Axis #	Unsigned 8 bit	0x00 only (AKD Parameter Manager)	Always 0x00
3	No. of Parameters	Unsigned 8 bit	0x01 - 0x27	0x01
4	Attribute	Unsigned 8 bit	0x00 reserved; 0x10 Value; 0x20 Description	Always 0x10
5	No. of Elements	Unsigned 8 bit	0x01 - 0xEA	0x01
6	PNU Number - upper 8 bits	Unsigned 8 bit	0x01 - 0xFF	PNU number
7	PNU Number - lower 8 bits	Unsigned 8 bit	0x01 - 0xFF	PNU number
8	Subindex - upper 8 bits	Unsigned 8 bit	0x00 only, except for free mapping telegram 400	0x00
9	Subindex - lower 8 bits	Unsigned 8 bit	0x00 only, except for free mapping telegram 400	0x00
10	Format	Unsigned 8 bit	0x41 for byte; 0x42 for Word; 0x43 for Dword; 0x00 for no data	0x41, 0x42, or 0x43
11	Number of Values	Unsigned 8 bit	0x01	0x01
12	Data - Most significant	Signed 8 bit	0x01 - 0xFF	Data
13	Data	Unsigned 8 bit	0x01 - 0xFF	Data
14	Data	Unsigned 8 bit	0x01 - 0xFF	Data
15	Data - Least significant	Unsigned 8 bit	0x01 - 0xFF	Data

Write Parameter Response (from drive to PLC)

Byte	Description	Data Size	Allowable Values	Typical Value
0	Request Reference	Unsigned 8 bit	0x00 is reserved; 0x01 - 0xFF	Defined by PLC
1	Response ID	Unsigned 8 bit	0x02 Read successful or 0x82 Unsuccessfull	0x02
2	Axis #	Unsigned 8 bit	0x00 only (AKD Parameter Manager)	0x00
3	No. of Parameters	Unsigned 8 bit	0x01 - 0x27	0x01
10	Format	Unsigned 8 bit	0x41 for byte; 0x42 for Word; 0x43 for Dword; 0x00 for no data	0x00
11	Number of Values	Unsigned 8 bit	0x00	0x00