

## 1.1 Memory Organization / Version 2

Pageaddr.		Byte number																																
		0							1							2							3											
Dec	Hex	0	1	2	3	4	5	6	7	0	1	2	3	4	5	6	7	0	1	2	3	4	5	6	7	0	1	2	3	4	5	6	7	
0	00h	Serial number														Check byte 0							SYSTEM											
1	01h	Serial number																					SYSTEM											
2	02h	Check byte1							<i>internal</i>							lock bytes (0xF6)							lock bytes (0x00)							SYSTEM				
3	03h	OTP							OTP							OTP							OTP							SYSTEM				
4	04h	country							Day of Birth							sex														LOCKED				
5	05h	valid until							Member id part 1																					LOCKED				
6	06h	Member id part 2							Member id part 3																					LOCKED				
7	07h	UID-Numeric																												LOCKED				
8	08h																													RESERVED				
9	09h																													RESERVED				
10	0Ah	Reserved for Events (planned)																												RESERVED				
11	0Bh																													RESERVED				
12	0Ch																													RESERVED				
13	0Dh																													RESERVED				
14	0Eh																													RESERVED				
15	0Fh																													RESERVED				
16	10h	Reserved for Association (planned)																												RESERVED				
17	11h																													RESERVED				
18	12h																													RESERVED				
19	13h																													RESERVED				
20	14h	Memory organization version														invalid																		
21	15h	Association id part 1							Association id part 2																									
22	16h	Name of Person, Name of Association																																
23	17h	Name of Person, Name of Association																																
24	18h	Name of Person, Name of Association																																
25	19h	Name of Person, Name of Association																																
26	1Ah	Name of Person, Name of Association																																
27	1Bh	Name of Person, Name of Association																																
28	1Ch	Name of Person, Name of Association																																
29	1Dh	Name of Person, Name of Association																																
30	1Eh	Name of Person, Name of Association																																
31	1Fh	Name of Person, Name of Association																																
32	20h																													FREE				
33	21h																													FREE				
34	22h																													FREE				
35	23h																													FREE				
36	24h	last association change (planned)																																
37	25h	User PIN (planned)																																
38	26h	last Update														Data CRC16																		
39	27h	Validation CRC16																																
40	28h	lock bytes (0x11)							lock bytes (0x0E)							<i>internal</i>														SYSTEM				
41	29h	16-bit counter														<i>internal</i>														SYSTEM				
42	2Ah	authentication configuration (0x20 00 00 00)																												SYSTEM				
43	2Bh	authentication configuration (0x01 00 00 00)																												SYSTEM				
44	2Ch	3DES authentication key																												SYSTEM				
45	2Dh	3DES authentication key																												SYSTEM				
46	2Eh	3DES authentication key																												SYSTEM				
47	2Fh	3DES authentication key																												SYSTEM				

## 1.2 Encoding / Version 2

Member-ID		
	Bit	Range
Block1	8	256
Block2	16	65.536
Block3	24	16.777.216
<b>Sum</b>	<b>48</b>	

Date Long		
	Bit	Range
Day	5	32
Month	4	16
Year	8	256 1900+Val
<b>Sum</b>	<b>17</b>	

Date Short		
	Bit	Range
Day	5	32
Month	4	16
Year	7	128 2000+Val
<b>Sum</b>	<b>16</b>	

Char-Encoding 5-bit (e.g. Member Name)		
Char	Val Hex	Val Dec
A	00h	0
B	01h	1
C	02h	2
D	03h	3
E	04h	4
F	05h	5
G	06h	6
H	07h	7
I	08h	8
J	09h	9
K	0Ah	10
L	0Bh	11
M	0Ch	12
N	0Dh	13
O	0Eh	14
P	0Fh	15
Q	10h	16
R	11h	17
S	12h	18
T	13h	19
U	14h	20
V	15h	21
W	16h	22
X	17h	23
Y	18h	24
Z	19h	25
Ä	1Ah	26
Ö	1Bh	27
Ü	1Ch	28
-	1Dh	29
SPACE	1Eh	30
DEVIDER	1Fh	31

Additional Char-Encoding 6-bit (e.g. Association Name)		
Char	Val Hex	Val Dec
0	20h	32
1	21h	33
2	22h	34
3	23h	35
4	24h	36
5	25h	37
6	26h	38
7	27h	39
8	28h	40
9	29h	41
/	2Ah	42
Point	2Bh	43
(	2Ch	44
)	2Dh	45
-	2Eh	46
-	2Fh	47
-	30h	48
-	31h	49
-	32h	50
-	33h	51
-	34h	52
-	35h	53
-	36h	54
-	37h	55
-	38h	56
-	39h	57
-	3Ah	58
-	3Bh	59
-	3Ch	60
-	3Dh	61
-	3Eh	62
-	3Fh	63