MIFARE 1K - block layout

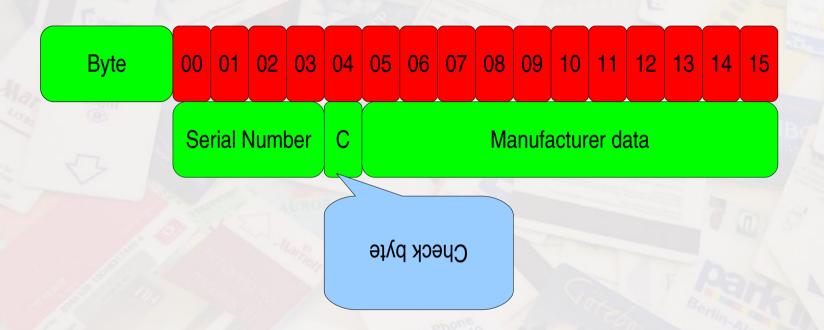
Sector 0	Block 0 Manufacturer block	Block 1	Block 2	Block 3 Sector trailer
Sector 2	Block 4	Block 5	Block 6	Block 7 Sector trailer
Sector 3	Block 8	Block 9	Block 10	Block 11 Sector trailer
Sector	Block	Block	Block	Block Sector trailer
Sector 15	Block 60	Block 61	Block 62	Block 63 Sector trailer

1b sectors, 4 blocks per sector,
1b bytes per block = 1024 bytes

Access control
Block



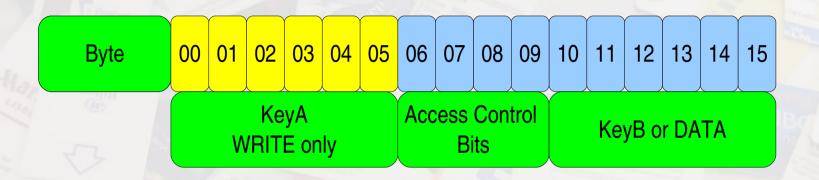
manufacturer block layout



Whole block is read only



access control block layout



- KeyA can never be read
- KeyB may be read and/or written
 - depending on ACB
- · ACB for various combinations
 - who may read/write keys
 - who may increment/decrement/restore value blocks



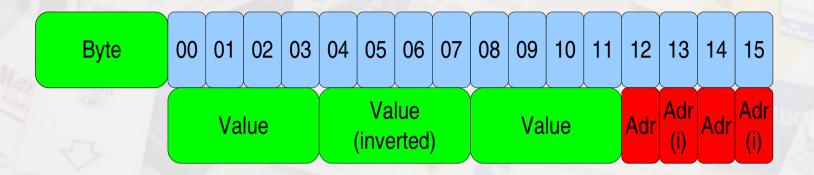
data block



1b bytes free storage



value block



- Value stored 3 times
 - Twice non-inverted, once inverted
- Address byte stored 4 times
 - Twice non-inverted, twice inverted
 - Audit trails
 - Backup
 - Read only (by value commands)



tag operations



