Memory Mapping

2K/2 Memory

	Block #	Data
48 Bytes	0	Card Serial Number
	1	Configuration Data
	2	Not Used
	3	Key 1
	4	Key 2
	5	Application Issuer Data
104 Bytes	6–18	Reserved for HID Access Control Application
104 Bytes	19–31	Application Area 2

Note: There are always 8 Bytes (64 bits) in a block.

Manufacturer, configuration, and key storage area

HID Application Area on all credentials

Read/write area for application developers

***iCLASS* credentials:**

- ***iCLASS***, the most powerful read/write contactless smart card available today, features multiple memory sizes, form factor options, and configurations.
- All other application areas are open to developer read/write data applications.
- To learn more about the amount of memory used to store various applications, visit **www.hidcorp.com/iclass** and click on Memory Mapping.

2K bits (256 Bytes) *iCLASS* credentials:

- The 2K is a highly secure credential optimized for standard access control applications.
- Application Area 2 is limited to 104 Bytes of read/write data. The key that secures the data cannot be updated.

16K bits (2K Bytes) *iCLASS* credentials:

- The 16K is a highly modifiable, multi-application credential with enough memory area to store most common biometric templates.
- Application Area 2 of the 16K/2 credential allows for 1896 Bytes of read/write data, all of which can be accessed with a single authentication key.
- The 16K credential can be configured for either 2 or 16 application areas. Note: Once configured, the credential cannot be reconfigured.
- The configuration block (block 1) of pages 1 through 7 on a 16K/16 credential is modifiable. This allows for the additional configuration of the Application Limit on these pages.

16K/2 Memory

	Block #	Data
48 Bytes	0	Card Serial Number
	1	Configuration Data
	2	Not Used
	3	Key 1
	4	Key 2
	5	Application Issuer Data
104 Bytes	6–18	Reserved for HID Access Control Application
1896 Bytes	19–255	Application Area 2

16K/16 Memory

	Block #	Data	
Page 0	0	Card Serial Number	48 Bytes
	1	Configuration Data	
	2	Not Used	
	3	Key 1	
	4	Key 2	
	5	Application Issuer Data	
	6–18	Reserved for HID Access Control Application	104 Bytes
	19–31	Application Area 2	104 Bytes
Page 1	0	Card Serial Number	48 Bytes
	1	Configuration Data	
	2	Stored Value Area	
	3	Key 3	
	4	Key 4	
	5	Application Issuer Data	
	6–18	Application Area 3	208 Bytes
	19–31	Application Area 4	
Pages 2 thru 6			
Page 7	0	Card Serial Number	48 Bytes
	1	Configuration Data	
	2	Stored Value Area	
	3	Key 15	
	4	Key 16	
	5	Application Issuer Data	
	6–18	Application Area 15	208 Bytes
	19–31	Application Area 16	

For more information, please see Application Note #28 at ***www.hidcorp.com/iclass***