FARGO®
The World's Most Secure Card Identity Systems

March 8, 2005

FIPS 201 Standards/Fargo Recommended Solution

FIPS 201 Standards (as of *2/20/2005)	Fargo Recommended Solution	Confidence Level in Meeting Specification	Rationale
Section 4.1.1 states 'Printed material shall not rub off during the life of the PIV card, nor shall the printing process deposit debris on the roller during printing and lamination.	HDP600 Series using High Secure Holographic HDP Film and 1.0 mil PolyGuard Overlaminate	**VERY HIGH** Confidence	The combination of the HDP Film and polyester patch applied to a printed card provides the greatest durability.
Section 4.1.1 states 'Printed material shall not interfere with contact and contactless ICCs and related components…'	HDP600 with lamination station - High Definition Printing	**VERY HIGH** Confidence	Reverse-image printing technology does not interfere with the contact and contactless ICCs and related components.
Section 4.1.2 states 'The card shall contain security features that … provide visual evidence of tampering attempts. At a minimum, the PIV card shall incorporate one such security feature. Incorporation of security features shall: 1) be in accordance with durability requirements [ISO7810], 2) be free of defects, such as fading and discoloration, 3) not obscure printed information, and 4) not impede access to machine-readable information.'	High Secure Holographic HDP Film and 1.0 mil PolyGuard Overlaminate	**HIGH** Confidence	This indicates that the durability capability of the patch material placed on the card surface should meet same durability requirements as the card body itself. We have tested for these requirements with our UltraCard IIIs (Polyester/PVC blend) with success. We will need a chip cutout in the overlaminate for a card with a contact chip (not impede access to machine-readable information). Fargo's 1.0mil PolyGuard laminate will address UV fade ('free of defects, such as fading and discoloration'). Holograms do not obscure printed information as we have completed testing that shows holographic overlaminates do not affect the bar code grade (the letter grade of the reading does not decrease when a hologram is placed over a bar code).
Section 4.1.3 states 'Minimum ANSI 322 tests should include card flexure, static stress, plasticizer exposure, impact resistance, card structural integrity, surface abrasion, temperature and humidity induced dye migration, ultraviolet light exposure and a laundry test. Cards shall not malfunction or delaminate after hand cleaning with a mild soap and water mixture.'	High Secure Holographic HDP Film and 1.0mil PolyGuard laminate	**HIGH** Confidence	[My opinion: This section you've quoted also could be speaking to simple card printing durability (as opposed to card print + overlaminate). Spell out a bit more about HDP printing's durability/unlikelihood of HDP printing to delaminate.] The standard is clearly calling out for lamination on one or both sides of the card. Fargo 1.0mil PolyGuard Overlaminate in combination with LC module meets this specification. It will require a composite card material. We have completed card flexure, static stress, plasticizer exposure, card structural integrity, surface abrasion, temperature and humidity induced dye migration, daylight exposure stability and a laundry test on the proposed new UV patch on UltraCard III card stock.

* ***PLEASE NOTE!*** *Information subject to change without notice.*

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FIPS 201 Standards/Fargo Recommended Solution, cont.

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Section 4.1.3 states 'The card material shall withstand the effects of temperatures required by the application of a polyester laminate on one or both sides of the card by commercial off the shelf equipment. The card material shall allow production of a flat card in accordance with [ISO7810] after lamination of one or both sides of the card.'	Ultracard III or equivalent	**SOME** Confidence	Fargo's Ultracard III has proven minimal warpage when passed through Fargo printer/encoders and laminators – set at default lamination conditions.
Section 4.1.4 states 'Reserved areas on the card that are not to be used for printing due to the placement of the embedded electronics. Technological advancements may obviate the need for restricted areas.'	HDP600 with lamination station - High-Definition Printing	**VERY HIGH** Confidence	HDP should allow the end-user to use the entire surface of the card (minus the contact chip) for the printed image.
Section 6.2.1 states 'The visual authentication mechanism should have low resistance to tampering and forgery.'	High Secure Holographic HDP Film and 1.0mil PolyGuard laminate	**VERY HIGH** Confidence	HDP Film provides best security as far as inability to tamper with the printed image or remove the hologram.

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We are available to assist you with your efforts. The following individuals, along with your Fargo Sales Manager, are available to answer questions.

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