

# Thin Film Electronics

## First fully processed die from R2R line

Manufacturing update

Tech hardware & equipment

25 September 2018

**Price** **NOK1.00**

**Market cap** **NOK1,170m**

NOK8.14/US\$

Net cash (\$m) at 30 June 2018  
excluding financial lease 66.2

Shares in issue 1.17bn

Free float 96.2%

Code THIN

Primary exchange Oslo

Secondary exchange OTCQX

Thinfilm has announced that it has completed its first fully roll-processed lots of die from its new roll-to-roll (R2R) manufacturing facility in California. These are Electronic Article Surveillance (EAS) die for use in anti-theft tags in apparel. It has also announced that it expects to complete its first fully roll-processed NFC lots by January 2019, reducing the uncertainty regarding the timescale for full NFC tag production.

Year end	Revenue (\$m)	EBITDA* (\$m)	PBT* (\$m)	EPS* (c)	DPS (c)	EV/Sales (x)
12/16	3.8	(36.9)	(42.8)	(6.5)	0.0	15.1
12/17	5.9	(50.9)	(57.5)	(6.6)	0.0	9.8
12/18e	5.4	(49.5)	(54.2)	(4.6)	0.0	10.7
12/19e	34.5	(43.3)	(51.3)	(4.4)	0.0	1.7

Note: \*EBITDA, PBT and EPS are normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments

In our August [note](#), we commented that Thinfilm had started fully processing EAS tags in the facility at the end of May. While results from the initial batch processed had established the commercial viability of the R2R line, the amount of time spent optimising equipment in San Jose was likely to push completion of a fully roll-processed lot out to early September. Today's announcement shows that this phase has now completed, with the successful fabrication of hundreds of thousands of EAS die. Management expects that engineering samples of EAS tags from roll-manufactured die will be shipped to Thinfilm's lead customer for qualification in Q418.

Our August note also observed that while some of the additional process steps required for NFC production could commence at end-Q318, in line with the schedule management set out in December 2016, full production would be delayed for an undetermined period because of modifications required to one of the other processing tools. Following in-depth discussions with the equipment manufacturer and an external consultant, management is now assured that a complete redesign of the processing tool is not needed. It will start the first roll-based NFC lot by end-September, and expects to complete its first fully roll-processed NFC lots by January 2019. Management notes that the incremental cost of the tool modification is not material.

### Share price performance



### Business description

Thin Film Electronics is a global leader in NFC mobile marketing and smart-packaging solutions using printed electronics technology. This technology should enable it to offer printed NFC tags at a substantially lower price point than conventional silicon tags.

### Analysts

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