

# Semiconductor

## Synopsys eyes on Ansys: a potential software giant in the making

Per Bloomberg ([link](#)), **Synopsys**, one of the big three Electronic Design Automation (EDA) names, is in advanced talks to **acquire Ansys for around US\$35bn or ~US\$400 per share in a stock-and-cash deal**. The transaction could be announced as soon as this week. Ansys is currently trading at US\$348.63 per share (as of market close on 8 Jan), representing ~15% premium if the deal gets closed at US\$400 per share.

**Ansys** (market cap of ~US\$30bn) is an engineering simulation and 3D design software company that delivers product modeling solutions. **Synopsys** (market cap of ~US\$74bn) offers EDA tools, semiconductor IP and services focusing on silicon design and verification. Together with Cadence, Siemens (Mentor), these three companies take up over 70% of the global EDA market ([link](#)).

**The history between Synopsys and Ansys** can be traced back to as early as 2017, when the two formed a strategic partnership to enhance the design optimization of HPC, mobile, and auto products. This collaboration was to provide better service for overlapping customers and collaboration partners, i.e., ARM and MediaTek. ([link](#))

**A further move to integrate Ansys business into Synopsys comes at a pivotal moment for Synopsys**, as co-founder Aart de Geus is set to become executive chairman, passing the CEO role to COO Sassine Ghazi on 1 January. The deal would be one of the largest transactions globally of the past 12 months, according to Bloomberg. We think this potential deal will mark as a strategic move for Synopsys, which will create synergies and expand product offerings, as well as enhance clients' services.

**Interestingly, another EDA designer Cadence approached Ansys earlier.** We think **EDA companies are all trying to expand their business horizontally**. The rationales are as follows.

- EDA industry is highly concentrated. These EDA companies are aiming to obtain synergies through acquisitions, an easier way to **expand business and maintain their leading market positions**. If this transaction goes through, the EDA market will become even more top-heavy, leaving little space for smaller players.
- **Given the current geopolitical risks, leading semiconductor players may all seek to diversify their business and product portfolios**. In 3Q23, Synopsys and Cadence obtained significant revenues from China, 20% and 17%, respectively. Although China EDA peers are still in the early stage, the trend of semi localization is inevitable. It may be wise to prepare for the rainy days.

For China peers, there are well over 20 EDA companies in China. The China's EDA market is growing rapidly although the TAM is not big enough to support multiple public companies with valuation well above RMB 10bn. Empyrean Tech (301269 CH, NR) and Semitronix (301095 CH, NR) went public in July and August 2022, respectively. The consolidation history of global EDA names can serve as good reference. As one of the leading domestic EDA names, Empyrean has been doing consolidation since going public. They acquired XinDA Design Automation Limited for US\$10mn to expand its product offerings in EDA tools in 2022. We believe China's EDA market will see more consolidations and names with rich product offerings will survive.

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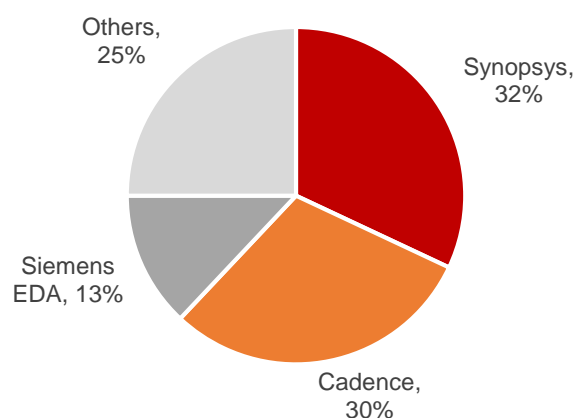
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**Figure 1: Global EDA software market share (2021)**

Source: Trendforce, CMBIGM estimates

**Figure 2: EDA comps table**

Company	LTM Rev. (US\$mn)	GPM	23 P/E	24 P/E
Synopsys	5,843	79.1%	44.6	37.1
Cadence	3,921	89.2%	51.3	44.4
Ansys	2,160	87.8%	40.7	36.5
Average		85.4%	45.5	39.3
Empyrean Tech	135	93.3%	214.6	154.9
Semitronix	62	64.4%	70.5	44.1
Primarius	49	81.9%	440.9	182.0
Average		79.9%	242.0	190.5

Source: Company data, Bloomberg, CMBIGM estimates  
 Note: Synopsys's fiscal year ends at 31 October.

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