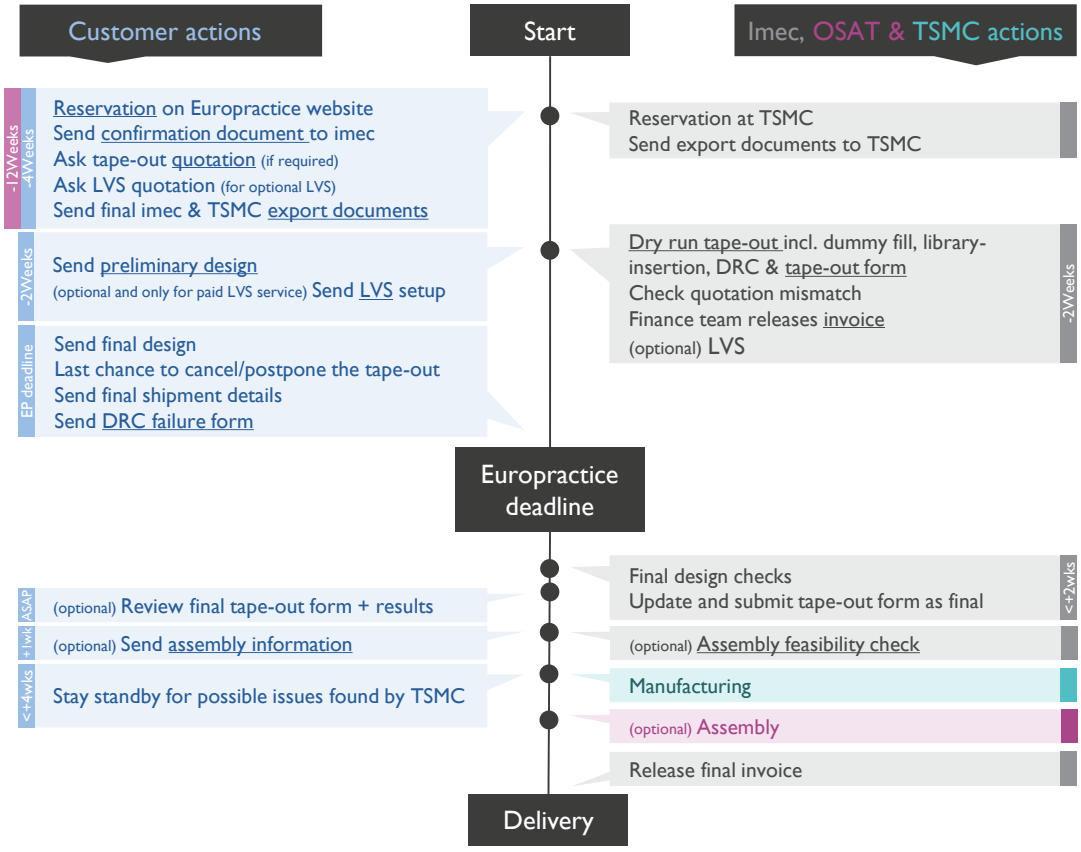
TSMC TAPE-OUT TIMELINES
EUROPRACTICE

EUROPRACTICE MPW & MINI@SIC TIMELINE



! Underlined keywords above are explained on page 3.
Additional important information is included.

! Some nodes require additional time.
This results in different milestone dates as indicated in pink in above timeline.

TIMELINE KEYWORDS

TM NUMBER	TSMC assigns a unique foundry reference number to each design. Each TSMC run has a dedicated TM number e.g. TMAA01 and each participant has a unique seat number e.g. TMAA01_**C01**
RUN NUMBER	Imec assigns a unique number to each Europractice run.
PRELIMINARY DESIGN DELIVERY	The preliminary design should contain all CAD layers and unique devices and have final dimensions. The number of devices can still change, and the design does not need to be fully DRC clean yet. Remember to provide us you completed design delivery form as PDF together with the design.
TAPE-OUT FORM	We as tape-out engineer complete the TSMC tape-out form based on the design, the delivery form and customer feedback. This form basically describes the full design requirements and ensures TSMC has all data to correctly process your ASIC.
REVIEW TAPE-OUT FORM	The tape-out system can detect most human errors that are based on CAD layer misalignment between the form and design. Not all tape-out form options can be derived easily from a layout. Therefor we need the customers help to review the correctness of the selected options! Important to know is that the responsibility lies both at imec and at the customer to ensure it`s correct.
DRY RUN TAPE-OUT	The dry run tape-out process consists of multiple steps and has multiple purposes. It`s a must for each tape-out! The main idea is to prepare the project at imec and TSMC to facilitate and speed up the actual tape-out. Additionally we attempt to spot early issues based on our experience. Some examples of the dry run steps: DRC + feedback with up-to-date design rules, visual check, IP check, complete tape-out form, CAD layer vs. tape-out form check.
DRC FAILURE FORM	TSMC asks all customers to complete a DRC failure form for each tape-out. Therefor we ask you to provide the form at dry run stage. The target is to have a fully DRC clean design, but sometimes minor DRC errors are difficult to solve.
QUERIO	https://querio.imec.be is our website for access to foundry technology data.
EXPORT DOCUMENTS	Both imec and TSMC need to comply to government export regulations. We provide a template to be completed and returned before dry run.
ASSEMBLY INFORMATION	Follow the procedure from our application note: “AN-Guidelines to create a bonding diagram”
ASSEMBLY FEASIBILITY CHECK	Our dedicated assembly team checks your assembly information with the OSAT. General assembly requests: asicp.assembly@imec.be, Europractice assembly: Hennan.Oflu@imec.be
LVS	We can perform an LVS upon request. It`s a paid service and it requires time, so inform us timely so we can prepare. For additional information please contact our technology support team via IC-link.foundrysupport@imec.be
QUOTATION	If required for your organization, we can provide an official quotation upon request.
RESERVATION	To reserve on a specific run, submit your design registration via https://europractice-ic.com/requests/design-registration/
CONFIRMATION DOC	Upon completion of the design registration provide us a signed copy of the confirmation page.