



DIGITAL TRANSFORMS PHYSICAL

Q2'22 FINANCIAL RESULTS

Investor Relations

April 27, 2022



FORWARD LOOKING STATEMENTS

This presentation includes forward looking statements regarding PTC's future financial performance, strategic outlook and expectations, anticipated future operations, and expected effects of strategic investments and initiatives. Because such statements deal with future events, actual results may differ materially from those projected in the forward-looking statements. Information about factors that could cause actual results to differ materially from those in the forward-looking statements can be found in the appendix to this presentation and in PTC's Annual Report on Form 10-K, Forms 10-Q and other filings with the U.S. Securities and Exchange Commission.

IMPORTANT INFORMATION ABOUT OPERATING AND NON-GAAP FINANCIAL MEASURES

This presentation includes supplemental operating and non-GAAP financial measures, targets and estimates. The non-GAAP financial measures are not prepared in accordance with generally accepted accounting principles. The definitions of these items and reconciliations of non-GAAP financial measures to comparable GAAP measures are included in the appendix to this presentation.



Q2'22 HIGHLIGHTS

JIM HEPPELMANN – PRESIDENT & CEO

STRONG Q2'22 FINANCIAL RESULTS

Top Line



ARR in Q2

- \$1.53 billion, up 11% year over year
- \$1.56 billion constant currency, up 13% year over year, all organic
- Growth in every product group and geographic region

Bottom Line



Cash Flow in Q2

- \$142 million cash from operations
- \$140 million free cash flow
- \$158 million adjusted free cash flow, up 22% year over year
- 32% GAAP, 42% non-GAAP operating margin

STRONG Q2'22 BOOKINGS PERFORMANCE

Strength in both Digital Thread and Velocity, driven by demand for digital transformation and SaaS

Top Line

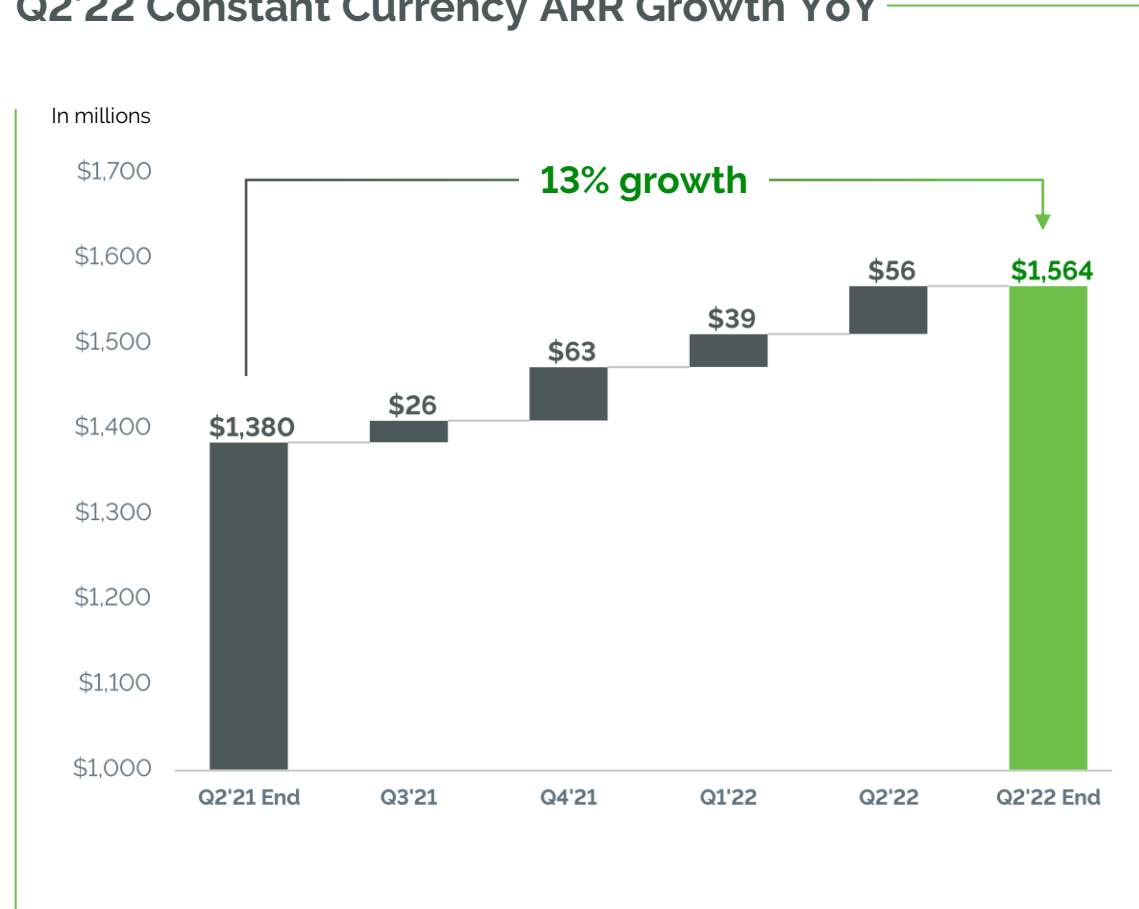


Bookings

- Mid-teens % bookings growth year over year on a constant currency basis
- Digital Thread strength led by Creo CAD and Windchill PLM, particularly in Europe and the Americas
- Velocity strength led by Arena PLM, across all geographic regions

OUR BUSINESS MODEL: ARR AND BOOKINGS DYNAMICS

Q2'22 Constant Currency ARR Growth YoY



- ARR is resilient, since growth is a rolling 4-quarter metric
- Bookings, which is a leading indicator for ARR, grew mid-teens % YoY in Q2'22 on a constant currency basis

STRONG ARR PERFORMANCE ACROSS GEOGRAPHIES

Americas

Constant currency ARR growth driven by double-digit growth in Digital Thread – Core and mid-20s % growth in Velocity

Europe

Constant currency ARR growth driven by double-digit growth in Digital Thread – Core and approximately 30% growth in Digital Thread – Growth

APAC

Constant currency ARR growth driven by double-digit growth in Digital Thread – Core

12% growth
12% growth CC¹

9% growth
15% growth CC¹
Inclusive of Russia exit

9% growth
14% growth CC¹

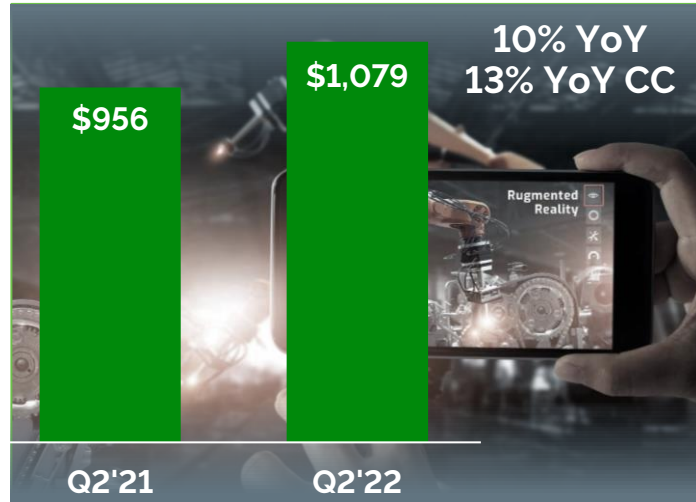
Q2'22 compared to Q2'21

¹constant currency

DIGITAL THREAD ARR PERFORMANCE¹

In millions
(constant currency)

Core



- CAD and PLM both grew in the double-digits, and continued to take market share
- Strong growth in all three geographic regions
- 18th consecutive quarter of double-digit ARR growth in Digital Thread – Core

Growth



- Landed 9 Digital Performance Management (DPM) deals across a broad diversity of industries
- Good pipeline for DPM offering through both PTC and Rockwell
- Increased focus on cross-selling IOT and AR into our core customer base

FSG



- Strong customer demand, with Servigistics, Retail PLM, and Arbortext performing well
- Strong growth, particularly in the Americas and Europe

¹ Amounts shown and discussed on this slide are on a constant currency basis; slide 18 shows constant currency and as reported ARR

BOSCH GROUP

Challenge

With 400,000 employees, 75,000 engineers, and a few thousand development teams, there is no single answer to digitalization.

As a Tier 1 automotive supplier, Bosch delivers a high volume of complex products. In industrial markets, Bosch typically engineers their products to order, sometimes even for a lot size of one. And, in their consumer divisions, the focus is on innovation and release rates.

The key challenge is how to drive end-to-end digital transformation at scale.

Solution

Holistic PLM and the Model Based Enterprise – Model Based Design (MBD) is helping Bosch engineers tear down their silo structure and 'islands' of teams/information.

Impact

- At the group level, Bosch is creating an environment of openness to freely share data models – IP, ideas, and innovation between teams.
- By transferring/reusing product information/models between domains, Bosch can manage configurations between disciplines and connect requirements to physical domains.

Bosch is a leading global supplier of technology and services divided into four business sectors: Mobility Solutions, Industrial Technology, Consumer Goods, and Energy and Building Technology.



CUMMINS

Challenge

Cummins set out to rethink their design process in light of their focus on sustainable products and processes. Cummins targeted the design phase because about 70% of an item's lifecycle CO2 footprint is set there.

Solution

Cummins is applying **Creo generative design and simulation** solutions in order to iterate faster, experiment with materials and design options, and ensure that products meet their requirements – all within the digital world.

Impact

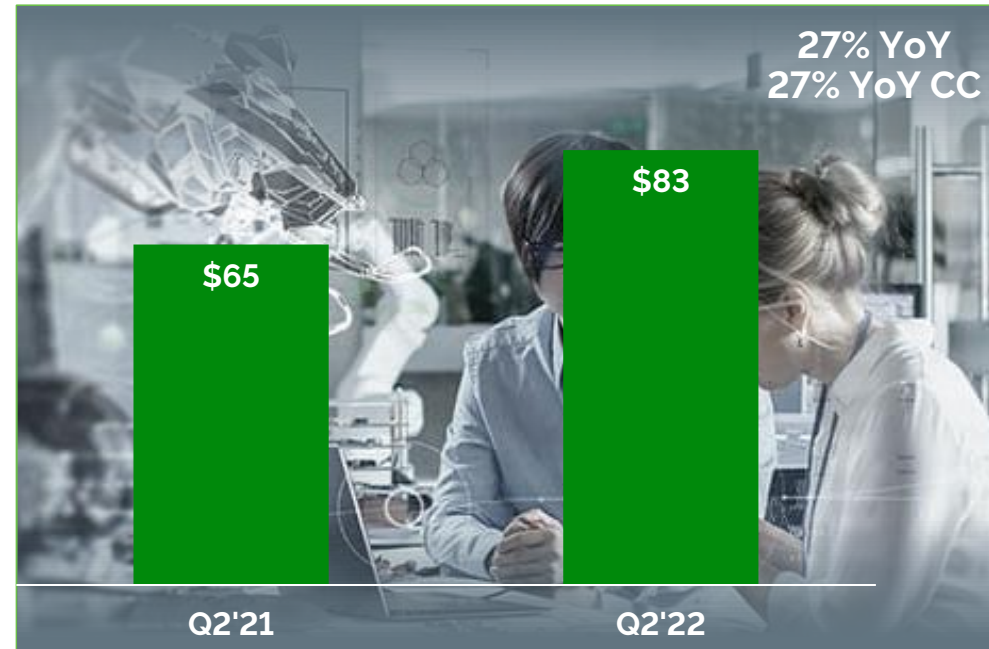
- Moving simulation upfront in their design process helps Cummins create better products, get to market faster, and optimize for environmental sustainability.
- Cummins is applying generative design to any conventionally designed part, which can reduce the material used by 10%-15%.

Cummins is the world's largest independent diesel and gas engine designer and manufacturer and a leading supplier of electrification systems, including fuel cells and battery systems. Cummins ranks in the top 6% on Newsweek's list of America's Most Responsible Companies and has spent 14 consecutive years on Ethisphere World's Most Ethical Companies list.



VELOCITY ARR PERFORMANCE¹

In millions
(constant currency)



- Mid-40s % Onshape ARR growth – driven by upsell/expansions, competitive win rates, and new logos
- Mid-20s % Arena ARR growth – driven by upsell/expansions and new logos

¹ Amounts shown and discussed on this slide are on a constant currency basis; slide 18 shows constant currency and as reported ARR

FILTRONIC

Challenge

Filtronic needed to drive faster product launches and increase customer satisfaction. Past reliance on siloed product development and manufacturing processes was creating unnecessary product design roadblocks and regulatory compliance delays.

Solution

Arena's cloud-based PLM solution enables Filtronic's dispersed teams to design, produce, and deliver innovative products quickly while enhancing quality and compliance processes.

Impact

- Enabled global collaboration of the latest product design information to speed time to market.
- Reduced engineering change cycle time by 50% with real-time collaboration and improved change management review processes.
- Simplified issue tracking, which reduced time to resolution by 50%.

Filtronic is a designer and manufacturer of high-performance radio frequency (RF), microwave, and mmWave components and subsystems for telecommunications infrastructure, aerospace & defense, critical communications and space.



RECENTLY SIGNED TRANSACTIONS

**INTLAND
SOFTWARE**



Both transactions are expected to close during Q3'22

WRAP UP

FISCAL 2022

Strong 1H'22
Forecasted to be our 5th
consecutive year of
double-digit ARR growth

STRONG PORTFOLIO

Portfolio of products is
unique and compelling,
and aligns well to
customer demand

GROWTH ACCELERATION

Strong bookings and
renewals throughout
1H'22

Highly resilient model
with SaaS tailwinds

PROFITABILITY EXPANSION

Optimized SaaS
operational model

Startup businesses
continue to mature up
their J-curves



PTC has never been in a better position to create shareholder value



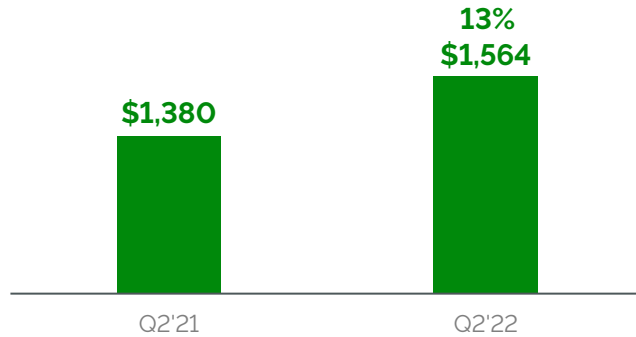
Q2'22 FINANCIAL REVIEW

KRISTIAN TALVITIE– EVP & CFO

Q2'22 RESULTS VS PRIOR YEAR

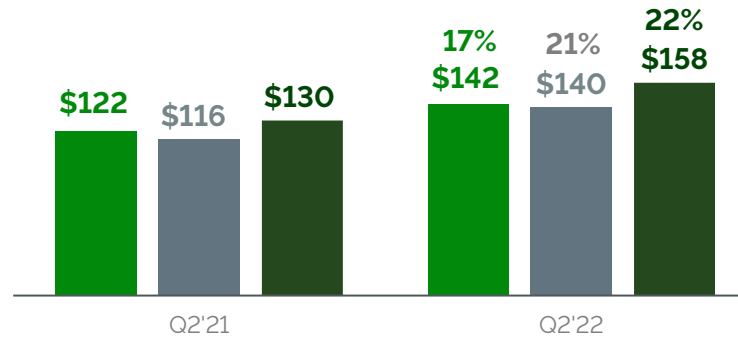
In millions

ARR at Constant Currency

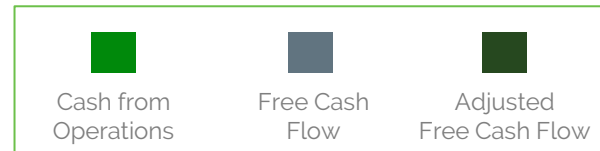


- ARR growth of 11%, 13% constant currency
- \$32M FX headwind in Q2'22
- ARR at the end of Q2'22 includes a \$4 million reduction associated with discontinuing our business operations in Russia

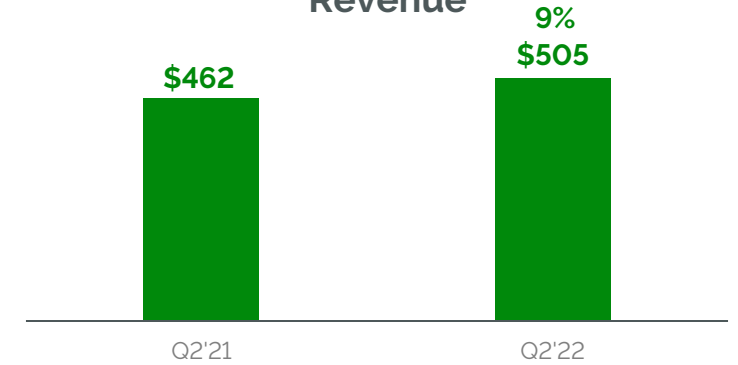
Cash Flow¹



- Strong operating and free cash flow performance, reflecting expected seasonality and continued strong operational execution, despite FX headwinds



Revenue



- Revenue growth of 9%, 13% constant currency
- Revenue growth rates can vary meaningfully due to upfront recognition of subscription license revenue under ASC 606
- Due to the impact of ASC606 on revenue, we believe ARR is the best metric to evaluate PTC's top line performance and Adjusted Free Cash Flow is the best metric to evaluate PTC's bottom-line performance

¹ Refer to the Non-GAAP Reconciliation Tables in the back of this presentation

BALANCE SHEET AND SHARE REPURCHASES

Strong balance sheet as of March 31, 2022

- Cash and cash equivalents of \$307 million
- Gross borrowings of \$1.275 billion
 - \$1.0 billion of senior notes with an aggregate interest rate of 3.8%
 - \$275 million drawn on revolving credit facility with a variable interest rate of 1.8%

Debt/EBITDA ratio: less than 3x

Share repurchase program

- Completed FY'22 planned repurchases of \$125 million, with \$5 million settling in Q2'22
- For the remainder of FY'22, we plan to focus on de-levering
- In FY'23 and on a go-forward basis, assuming our Debt/EBITDA ratio is below 3x, our goal is to return approximately 50% of our free cash flow to shareholders via share repurchases

ARR BY PRODUCT GROUP: FX DYNAMICS

FY'21					FY'22			
ARR by Product Group (Constant Currency) Using FX rates as of September 30, 2021 (in millions)	Qtr Ended				Qtr Ended			
	31-Dec	31-Mar	30-Jun	30-Sep	31-Dec	31-Mar	30-Jun Guidance Midpoint	30-Sep Guidance Midpoint
ARR by Product Group:								
Digital Thread - Core	\$ 940	\$ 956	\$ 976	\$ 1,013	\$ 1,041	\$ 1,079		
Digital Thread - Growth	174	180	180	193	198	207		
Digital Thread - FSG	178	180	181	190	190	195		
Digital Thread (Total)	\$ 1,292	\$ 1,315	\$ 1,337	\$ 1,396	\$ 1,429	\$ 1,481		
Velocity	10	65	69	73	78	83		
Ending ARR	\$ 1,302	\$ 1,380	\$ 1,406	\$ 1,468	\$ 1,507	\$ 1,564	\$ 1,588	\$ 1,653

FY'21					FY'22			
ARR by Product Group (as Reported)	Qtr Ended				Qtr Ended			
	31-Dec	31-Mar	30-Jun	30-Sep	31-Dec	31-Mar	30-Jun Midpoint*	30-Sep Midpoint**
ARR by Product Group:								
Digital Thread - Core	\$ 967	\$ 960	\$ 986	\$ 1,013	\$ 1,033	\$ 1,055		
Digital Thread - Growth	177	181	181	193	197	204		
Digital Thread - FSG	182	180	183	190	189	191		
Digital Thread (Total)	\$ 1,326	\$ 1,321	\$ 1,350	\$ 1,396	\$ 1,418	\$ 1,450		
Velocity	10	65	69	73	78	83		
Ending ARR	\$ 1,336	\$ 1,386	\$ 1,418	\$ 1,468	\$ 1,496	\$ 1,532	\$ 1,556	\$ 1,619

*Based on foreign exchange rates as of the end of Q2'22, we expect a \$32 million headwind relative to our constant currency ARR guidance for Q3'22

**Based on foreign exchange rates as of the end of Q2'22, we expect a \$34 million headwind relative to our constant currency ARR guidance for FY'22

FY'22 AND Q3'22 GUIDANCE

In millions except percentages	FY'22 Previous Guidance	FY'22 Guidance	FY'22 YoY Growth Guidance	Q3'22 Guidance
ARR at Constant Currency ¹	\$1,625 - \$1,660	\$1,640 - \$1,665	12% - 13%	\$1,580 - \$1,595
Cash from Operations	~\$430	~\$430	~17%	~\$110
Free Cash Flow	~\$400	~\$405	~18%	~\$105
Adjusted Free Cash Flow	~\$450	~\$455	~16%	~\$120
Revenue	\$1,870 - \$1,975	\$1,905 - \$1,975	5% - 9%	

- **FY'22 Constant Currency ARR guidance raised**, despite Russia exit
- **FY'22 Free Cash Flow and Adjusted Free Cash Flow guidance raised**, despite FX headwinds and Russia exit
- **Low end of FY'22 Revenue guidance raised**, despite FX headwinds and Russia exit

Reconciliation of Cash from Operations to Adjusted Free Cash Flow

In millions	FY'22 Previous Guidance	FY'22 Guidance	Q3'22 Guidance
Cash from Operations	~\$430	~\$430	~\$110
Capex	(~\$30)	(~\$25)	(~\$5)
Free Cash Flow	~\$400	~\$405	~\$105
Restructuring payments	\$45 to \$50	\$40 to \$45	~\$10
Transaction-related payments	-	~\$5	~\$5
Adjusted Free Cash Flow	~\$450	~\$455	~\$120

¹ On a constant currency basis, using our FY'22 Plan foreign exchange rates (rates as of September 30, 2021) for all periods

EXPECTED FINANCIAL IMPACT OF INTLAND AND ITCI

INTLAND
SOFTWARE



- **Constant currency ARR:** Expect a positive impact of approximately \$15 million in FY'22
- **Free cash flow:** Expect the transactions to be immaterial to FY'22 and accretive to FY'23
- Our FY'22 guidance does not reflect operating results of the Intland acquisition and the ITCI transaction, the impact of business combination accounting, incremental interest expense, or transaction-related charges not incurred as of the end of Q2'22; We expect to update FY'22 guidance in conjunction with Q3'22 results after both transactions are closed

FY'22 ILLUSTRATIVE CONSTANT CURRENCY ARR MODEL

What does PTC need to deliver to achieve the midpoint of constant currency ARR guidance?

in millions	Actual Q1'21	Actual Q2'21	Actual Q3'21	Actual Q4'21	Actual Q1'22	Actual Q2'22	What you need to believe Q3'22	What you need to believe Q4'22
Beginning ARR	1,258	1,302	1,380	1,406	1,469	1,507	1,564	1,588
Sequential ARR growth	44	78	26	62	39	56	24	65
Sequential ARR growth %	3.5%	6.0%	1.8%	4.4%	2.7%	3.7%	1.5%	4.1%
Ending ARR	1,302	1,380	1,406	1,468	1,507	1,564	1,588	1,653
ARR growth YoY	135	184	189	210	205	183	182	185
Organic ARR growth YoY	135	131	132	151	142	183	182	185
ARR growth % YoY	12%	15%	16%	17%	16%	13%	13%	13%
Organic ARR growth YoY %	12%	11%	11%	12%	11%	13%	13%	13%

- Q3'22 and FY'22 Ending ARR modelled at the midpoints of our guidance ranges
- In 1H'22, we added approximately \$25M more ARR than in 1H'21 on an organic basis
- To hit the midpoint of guidance for 2H'22, we need to add the same amount of ARR as we added in 2H'21

FY'22 AND Q3'22 GUIDANCE ASSUMPTIONS

- We provide ARR guidance on a constant currency basis, using our FY'22 Plan foreign exchange rates (rates as of September 30, 2021) for all periods. Based on foreign exchange rate fluctuations as of the end of Q2'22, we currently expect a \$34 million headwind (previously \$13 million), relative to our constant currency ARR guidance for FY'22, and a \$32 million headwind, relative to our constant currency ARR guidance for Q3'22.
- We expect FY'22 organic churn to improve by approximately 100 basis points over FY'21.
- Due to invoicing seasonality, the majority of our collections occur in the first half of our fiscal year. Q4 is our lowest cash flow generation quarter.
- Costs are expected to ramp throughout FY'22 due to hiring and increased SaaS investments. At the mid-point of ARR guidance, we expect FY'22 GAAP operating expenses to increase approximately 3% to 4% (previously 4% to 5%) and non-GAAP operating expenses to increase approximately 2% to 3% over FY'21.
- FY'22 GAAP results are expected to include the items outlined below, totalling \$293 million to \$308 million (previously \$275 million to \$280 million), as well as their related tax effects:
 - \$160 million to \$170 million of stock-based compensation expense (previously \$178 million)
 - \$58 million of intangible asset amortization expense
 - \$35 million to \$40 million of restructuring charges (previously \$40 million to \$45 million)
 - \$35 million of FY'22 net realized losses from the sale of an equity investment (new)
 - Approximately \$5 million of transaction-related charges (new)
- Our FY'22 guidance does not reflect operating results of the Intland acquisition and the ITCI transaction, the impact of business combination accounting, incremental interest expense, or transaction-related charges not incurred as of the end of Q2'22.
- Related to restructuring, for FY'22 we expect:
 - P&L charges of \$35 million to \$40 million (previously \$40 million to \$45 million), of which \$32 million was incurred in the first half of FY'22.
 - Cash outflows for restructuring payments of \$40 million to \$45 million (previously \$45 to \$50 million), of which \$28 million was paid in the first half of FY'22. We expect the majority of remaining payments to be made in Q3'22. Restructuring payments in FY'22 include \$5 million related to prior period actions, primarily the relocation of our headquarters in FY'19.
- Our FY'22 GAAP tax rate is expected to be approximately 20% and our non-GAAP tax rate is expected to be approximately 19%.
- FY'22 capital expenditures are expected to be approximately \$25 million (previously \$30 million).
- For the remainder of FY'22, we plan to focus on de-levering. In FY'23 and on a go-forward basis, assuming our Debt/EBITDA ratio is below 3x, our goal is to return approximately 50% of our free cash flow to shareholders via share repurchases.

FORWARD-LOOKING STATEMENTS

Statements in this presentation that are not historic facts, including statements about our future financial and growth expectations and targets, and potential stock repurchases, are forward-looking statements that involve risks and uncertainties that could cause actual results to differ materially from those projected. These risks include: the macroeconomic and/or global manufacturing climates may not improve when or as we expect, or may deteriorate, due to, among other factors, the COVID-19 pandemic and the effects of the Russia/Ukraine conflict, which could cause customers to delay or reduce purchases of new software, reduce the number of subscriptions they carry, or delay payments to us, all of which would adversely affect ARR and our financial results, including cash flow; our businesses, including our SaaS businesses, may not expand and/or generate the revenue or ARR we expect if customers are slower to adopt our technologies than we expect or if they adopt competing technologies; our signed transactions with Intland Software and ITC Infotech may not close when or as we expect due to the failure to achieve the applicable closing conditions and such transactions may not have the expected effects on our business or results of operations; our strategic initiatives and investments, including our restructuring and our accelerated investments in our transition to SaaS, may not deliver results when or as we expect; we may be unable to generate sufficient operating cash flow to repay amounts under our credit facility or to return 50% of free cash flow to shareholders, and other uses of cash or our credit facility limits or other matters could preclude such repayment and/or repurchases; and foreign exchange rates may differ materially from those we expect. In addition, our assumptions concerning our future GAAP and non-GAAP effective income tax rates are based on estimates and other factors that could change, including the geographic mix of our revenue, expenses, and profits. Other risks and uncertainties that could cause actual results to differ materially from those projected are detailed from time to time in reports we file with the Securities and Exchange Commission, including our most recent Annual Report on Form 10-K and Quarterly Reports on Form 10-Q.

OPERATING MEASURES

ARR: to help investors understand and assess the performance of our business as a SaaS and on-premise subscription company we provide an ARR (Annual Run Rate) operating measure. ARR represents the annualized value of our portfolio of active subscription software, cloud, SaaS, and support contracts as of the end of the reporting period. ARR includes orders placed under our Strategic Alliance Agreement with Rockwell Automation, including orders placed to satisfy contractual minimum commitments.

We believe ARR is a valuable operating metric to measure the health of a subscription business because it captures expected subscription and support cash generation from customers.

Because these measures represent the annualized value of customer contracts as of a point in time, they do not represent revenue for any particular period or remaining revenue that will be recognized in future periods.

Bookings: we define Bookings as the annualized value, based on the final month of the contract, of new renewable software contracts committed to in a period. For contracts with terms of less than one year that are not associated with an existing contract, the booking is equal to the total contract value.

Bookings can flow into ARR or DARR, depending on the start date of the contract, or in the case of ramp deals, the start dates of each subsequent tranche of the ramp.

NON-GAAP FINANCIAL MEASURES

PTC provides supplemental non-GAAP financial measures to its financial results. We use these non-GAAP financial measures, and we believe that they assist our investors, to make period-to-period comparisons of our operating performance because they provide a view of our operating results without items that are not, in our view, indicative of our operating results. These non-GAAP financial measures should not be construed as an alternative to GAAP results as the items excluded from the non-GAAP financial measures often have a material impact on our operating results, certain of those items are recurring, and others often recur. Management uses, and investors should consider, our non-GAAP financial measures only in conjunction with our GAAP results.

Non-GAAP operating expense and EPS exclude the effect of the following items: stock-based compensation; amortization of acquired intangible assets; acquisition-related and other transactional charges included in general and administrative expenses; restructuring and other charges, net; non-operating charges and credits; and income tax adjustments. Additional information about the items we exclude from our non-GAAP financial measures and the reasons we exclude them can be found in "Non-GAAP Financial Measures" on page 24 of our Annual Report on Form 10-K for the fiscal year ended September 30, 2021. In FY'21, we incurred tax expense related to a South Korean tax matter which is excluded from our non-GAAP financial measures as it is related to prior periods and not included in management's view of results for comparative purposes. We also recorded a tax benefit in FY'21 related to the release of our U.S. valuation allowance as a result of the Arena acquisition and our conclusion that it is now more likely than not that we will realize the majority of our deferred tax assets in the U.S. As the non-GAAP tax provision is calculated assuming that there is no valuation allowance, this benefit has been excluded from our non-GAAP financial measures.

Free Cash Flow and Adjusted Free Cash Flow – PTC provides information on free cash flow and adjusted free cash flow to enable investors to assess our ability to generate cash without incurring additional external financings and to evaluate our performance against our announced long-term goals and intent to return approximately 50% of our free cash flow to shareholders via stock repurchases. Free cash flow is net cash provided by (used in) operations net of capital expenditures. Adjusted free cash flow is free cash flow net of restructuring payments, acquisition-related payments, and non-ordinary course tax-related payments or receipts. Free cash flow and adjusted free cash flow are not measures of cash available for discretionary expenditures.

Constant Currency (CC) Change Metric – We present CC information to provide a framework for assessing how our underlying business performed excluding the effects of foreign currency rate fluctuations. To present CC information, FY'22 and comparative prior period results for entities reporting in currencies other than United States dollars are converted into United States dollars using the foreign exchange rate as of September 30, 2021, rather than the actual exchange rates in effect during that period.

NON-GAAP RECONCILIATION

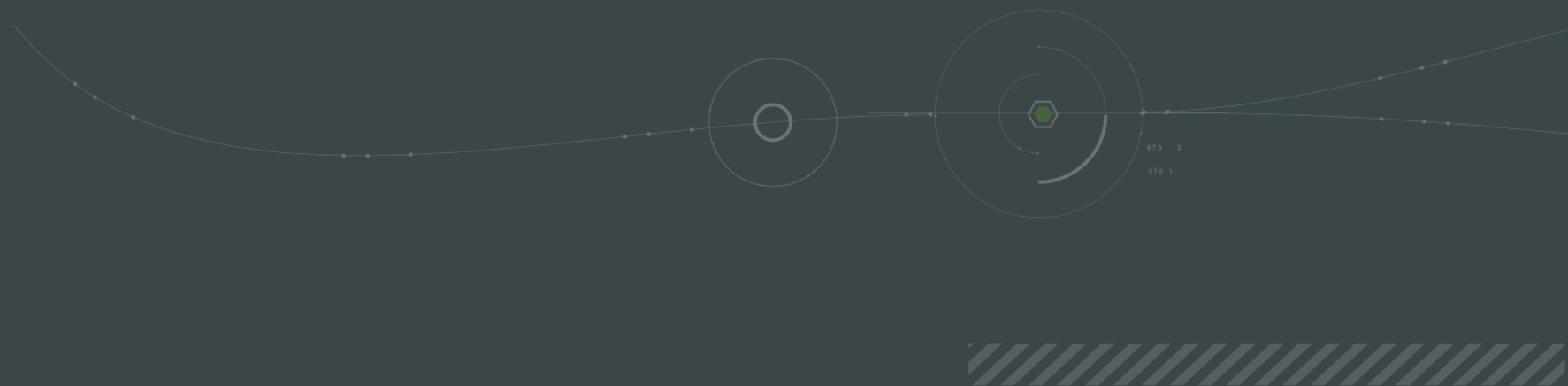
In millions	Q2'22	Q2'21
Cash from Operations	\$142.3	\$121.7
Capex	\$2.1	\$5.4
Free Cash Flow	\$140.2	\$116.3
Restructuring payments	\$17.8	\$4.4
Transaction-related payments	\$0.4	\$8.2
Non-ordinary course tax payments	-	\$1.0
Adjusted Free Cash Flow	\$158.4	\$129.9



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THANK YOU

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