

STM32MP257F-EV1

MB1936

Table of contents

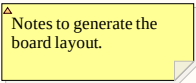
Sheet 1: Project overview (this page)	
Sheet 2: Top View	
Sheet 3: STM32MP257 I/Os	
Sheet 4: Power PMIC	
Sheet 5: STM32MP257 Power	
Sheet 6: 2_DDR4_16bits	
Sheet 7: Ethernet 1	
Sheet 8: Ethernet 2	
Sheet 9: Ethernet 3	
Sheet 10: FDCAN	
Sheet 11: USB_PCIe	
Sheet 12: USB_HUB	
Sheet 13: SDcard_eMMC	
Sheet 14: QSPI_NOR	
Sheet 15: Video	
Sheet 16: Expansion and mikroBUS connectors	
Sheet 17: Peripherals	
Sheet 18: STlink V3EC	

Legend

General comment such as function title, configuration, ...

Text to be added to silkscreen.

Warning text.

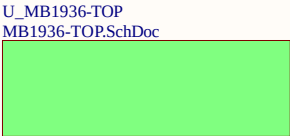


Open Platform License Agreement

The Open Platform License Agreement (“Agreement”) is a binding legal contract between you (“You”) and STMicroelectronics International N.V. (“ST”), a company incorporated under the laws of the Netherlands acting for the purpose of this Agreement through its Swiss branch 39, Chemin du Champ des Filles, 1228 Plan-les-Ouates, Geneva, Switzerland.

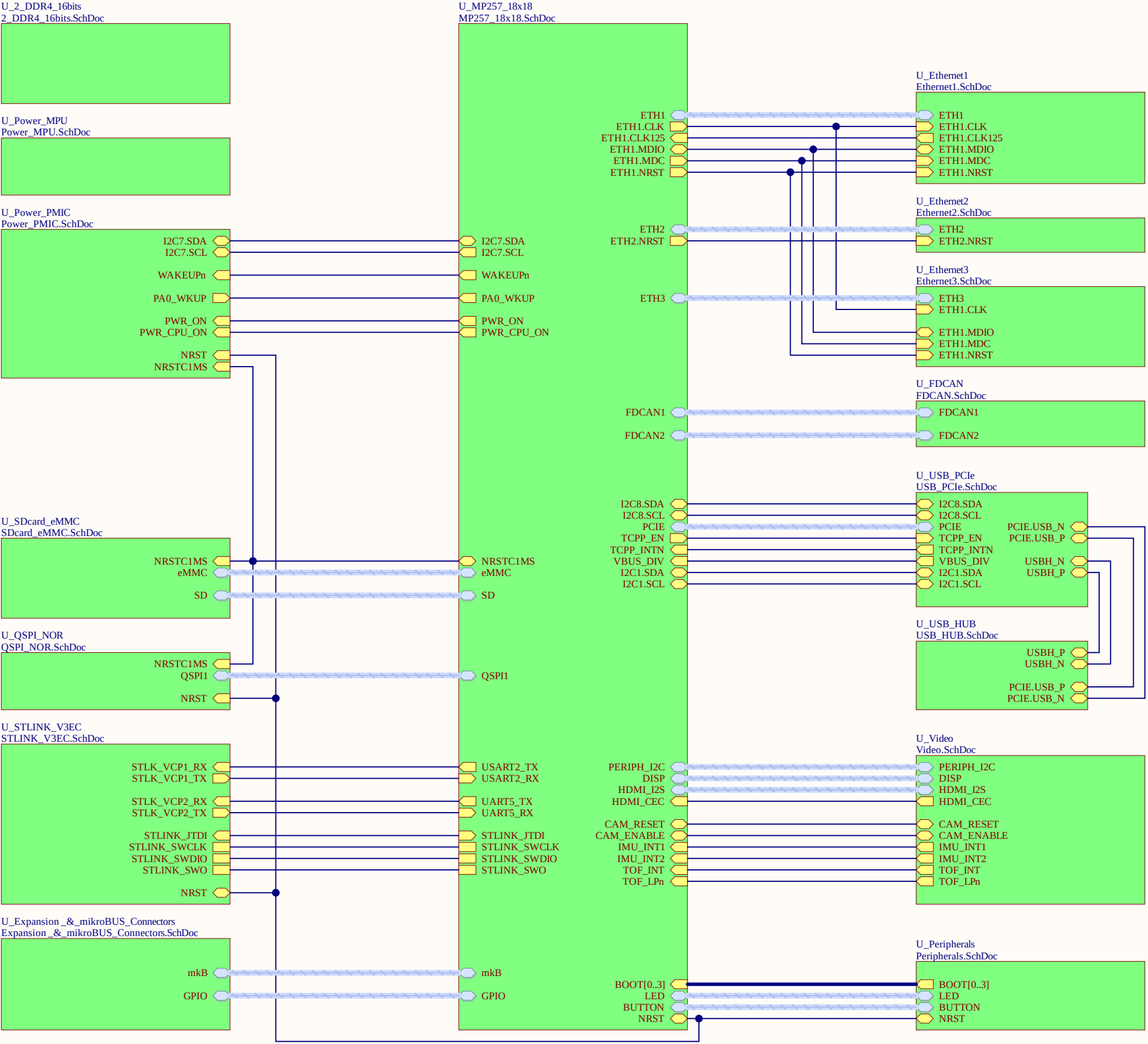
By using the enclosed reference designs, schematics, PC board layouts, and documentation, in hardcopy or CAD tool file format (collectively, the “Reference Material”), You are agreeing to be bound by the terms and conditions of this Agreement. Do not use the Reference Material until You have read and agreed to this Agreement terms and conditions. The use of the Reference Material automatically implies the acceptance of the Agreement terms and conditions.

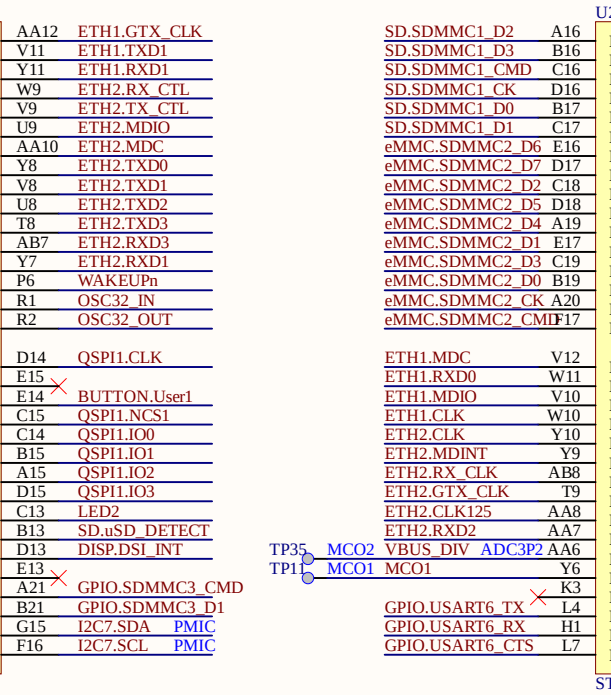
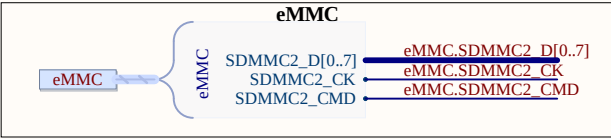
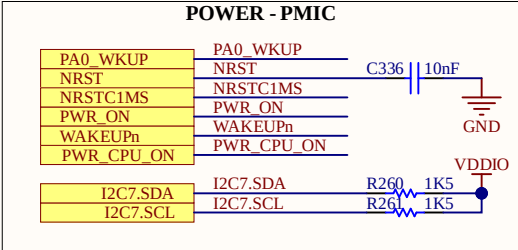
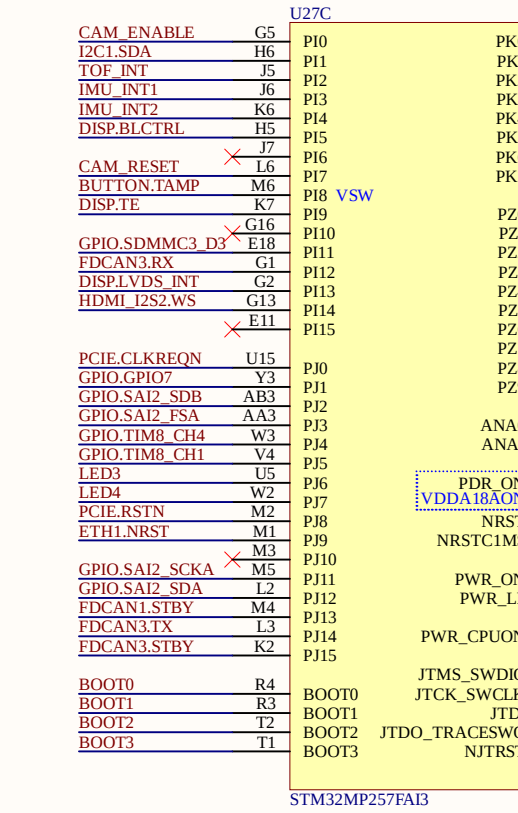
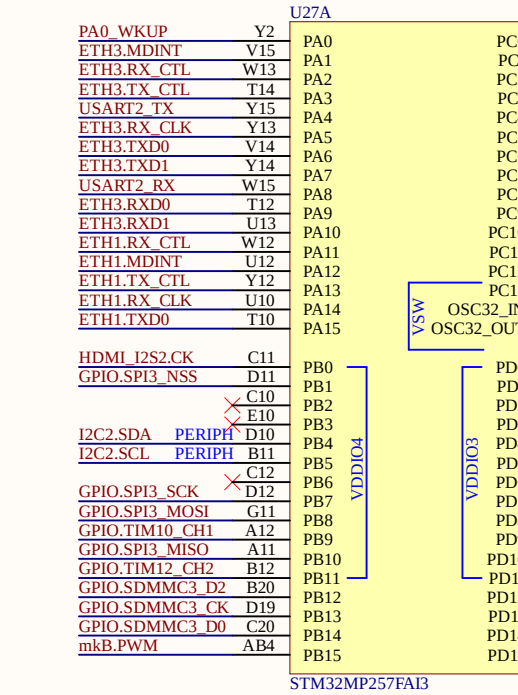
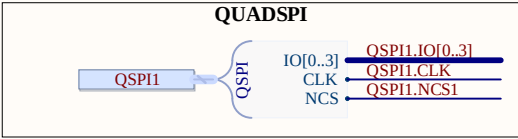
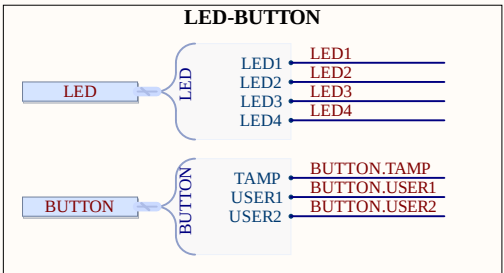
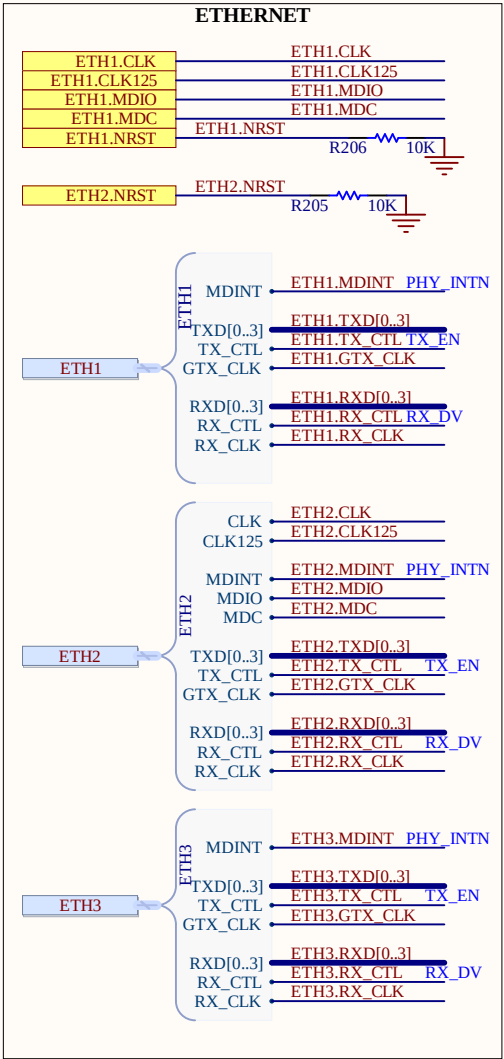
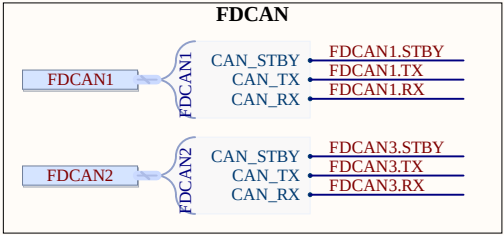
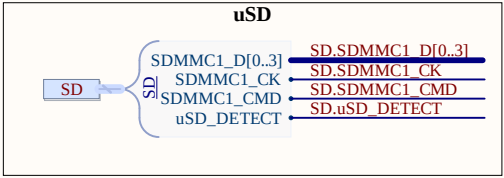
The complete Open Platform License Agreement can be found on www.st.com/opla.

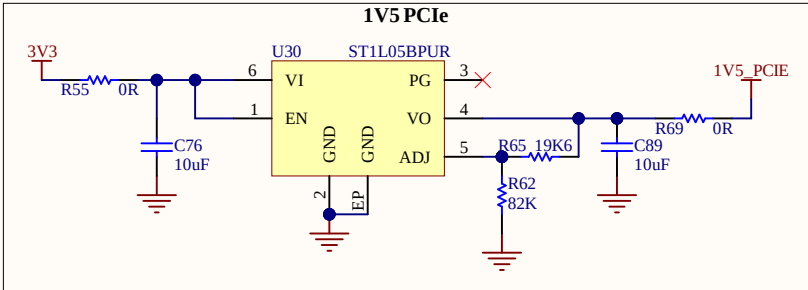
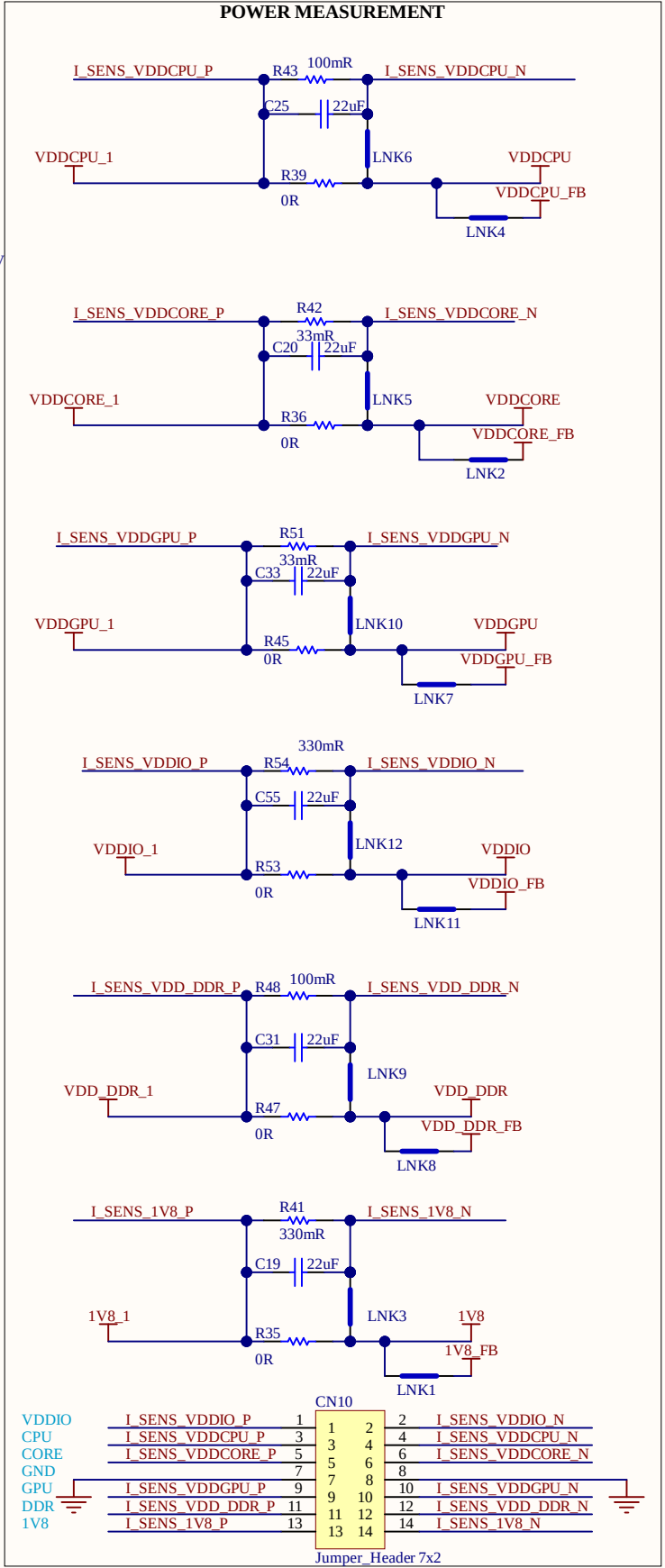
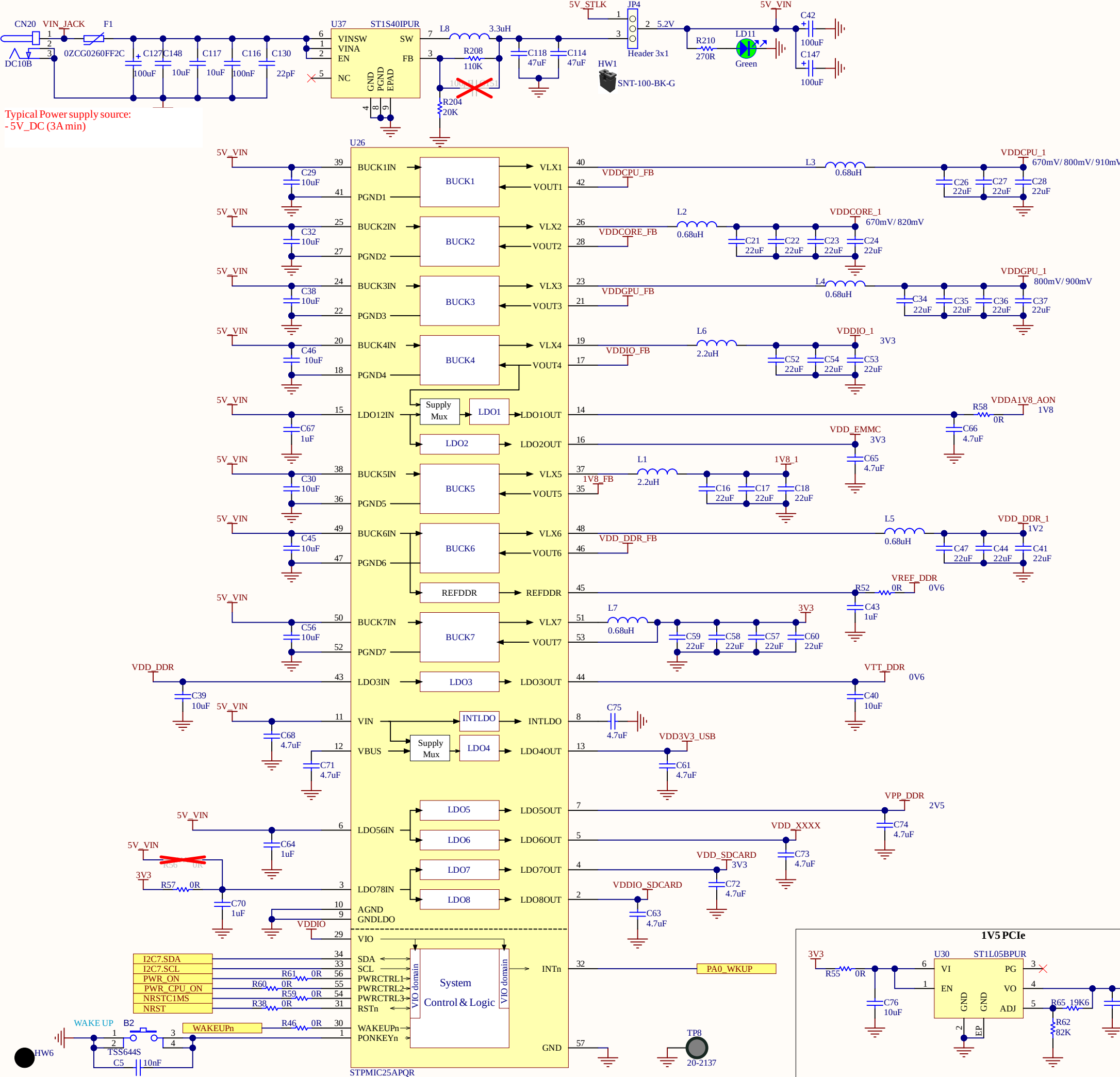


Title: Project overview		
Project: STM32MP257F-EV1		
Variant: MP257F_X		
Revision: E-01		Reference: MB1936
Size: A4	Date: 27-Nov-25	Sheet: 1 of 18

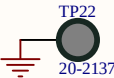
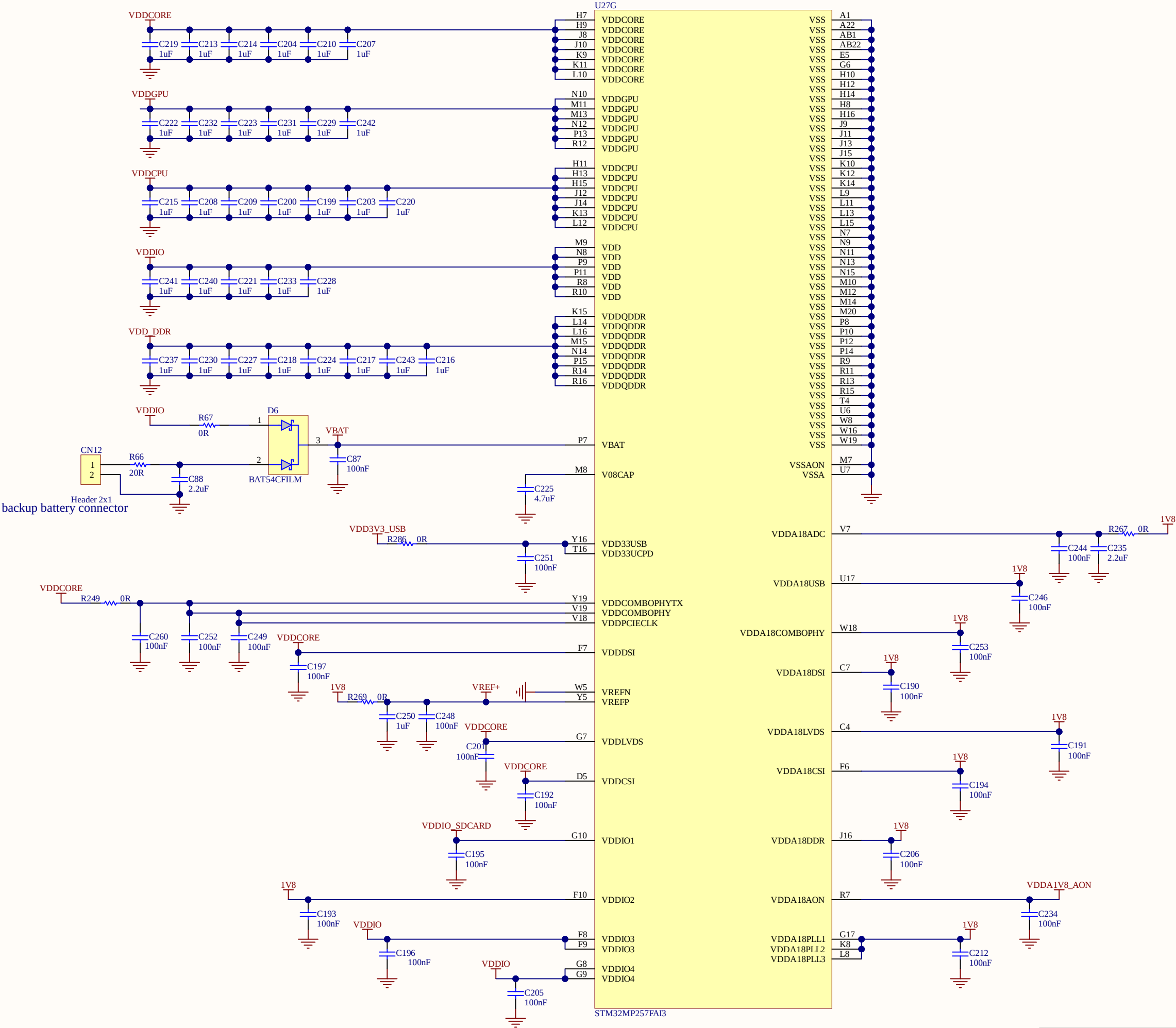


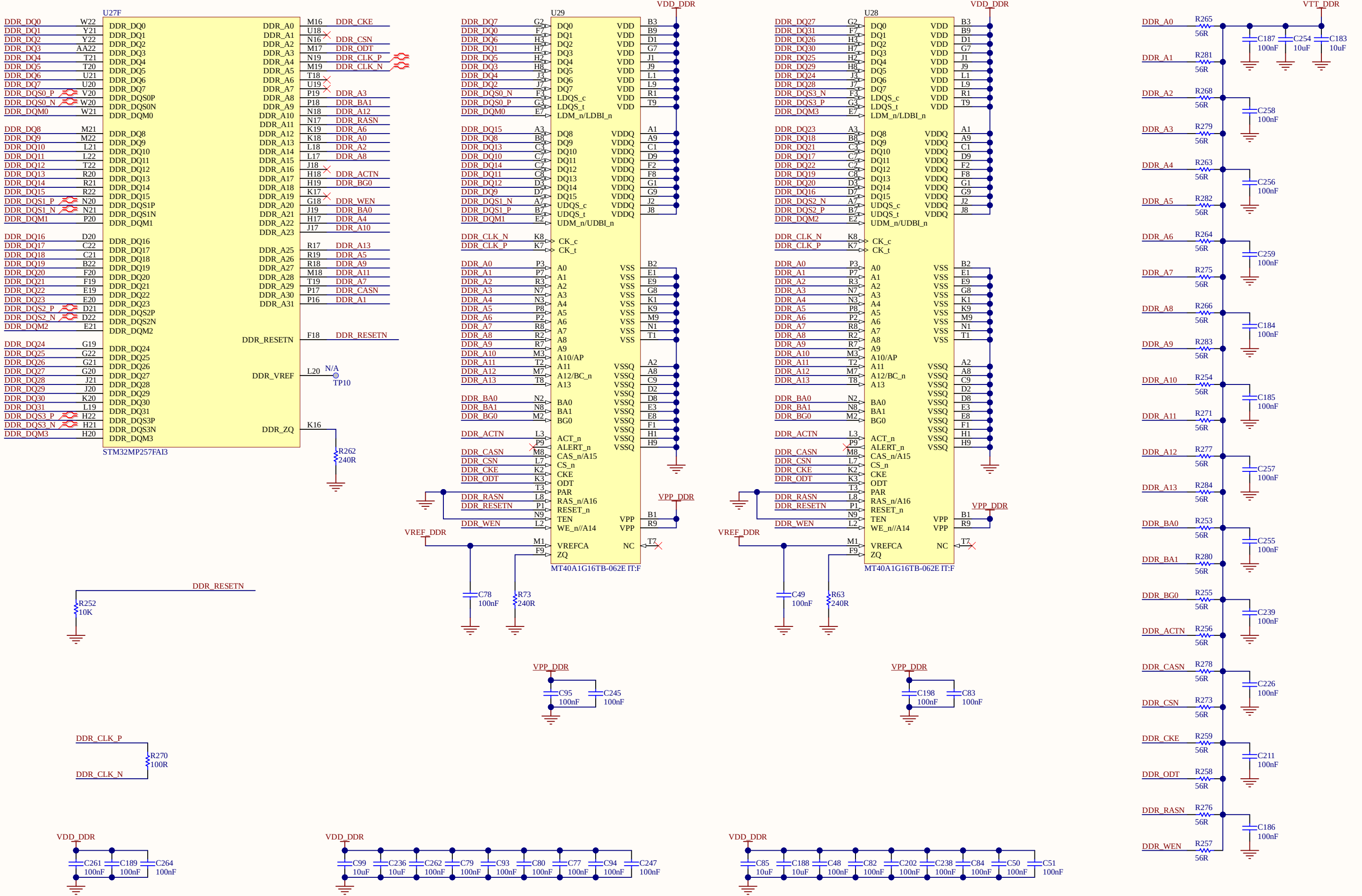




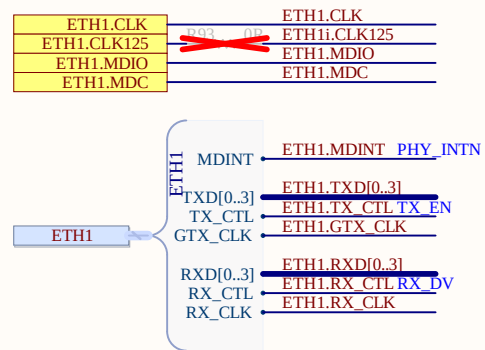


Power MPU

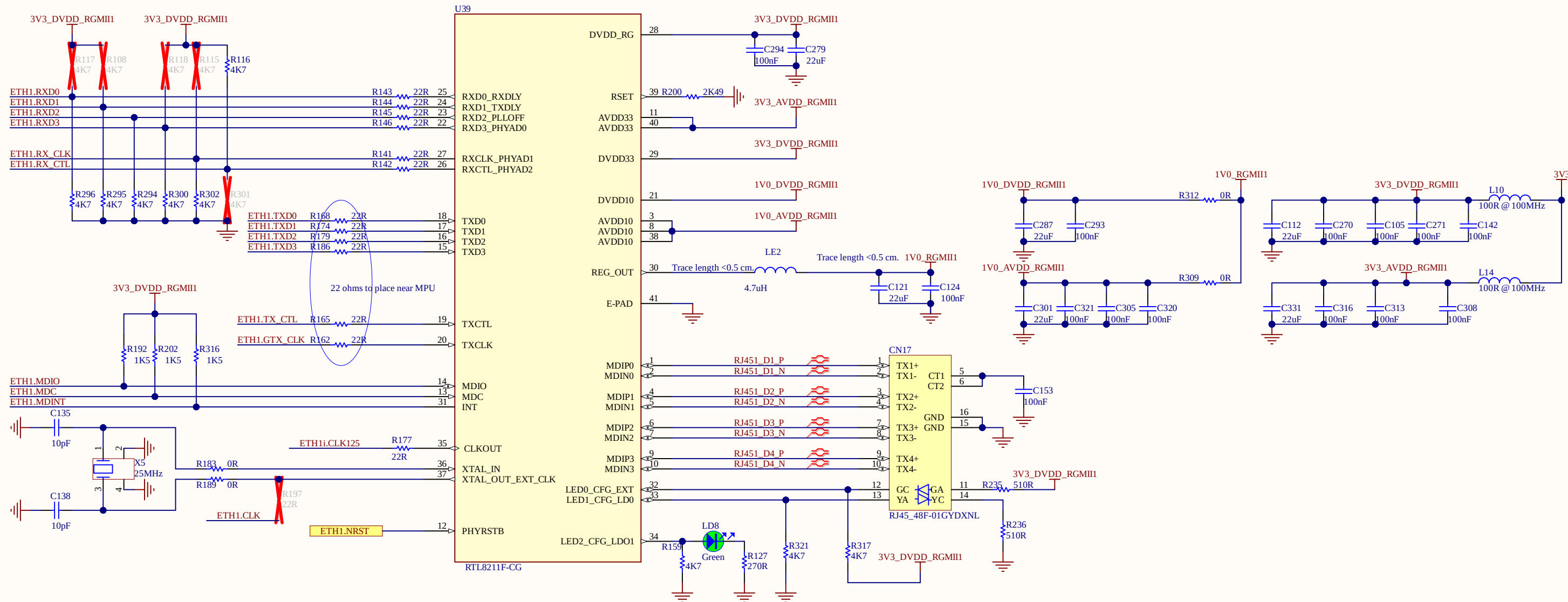




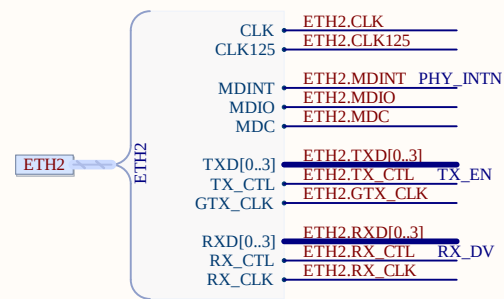
RGMII ETH1



TXC / RXC : no 2ns delays
PHY Address :
AD[2:0] : 100 (0x04) default



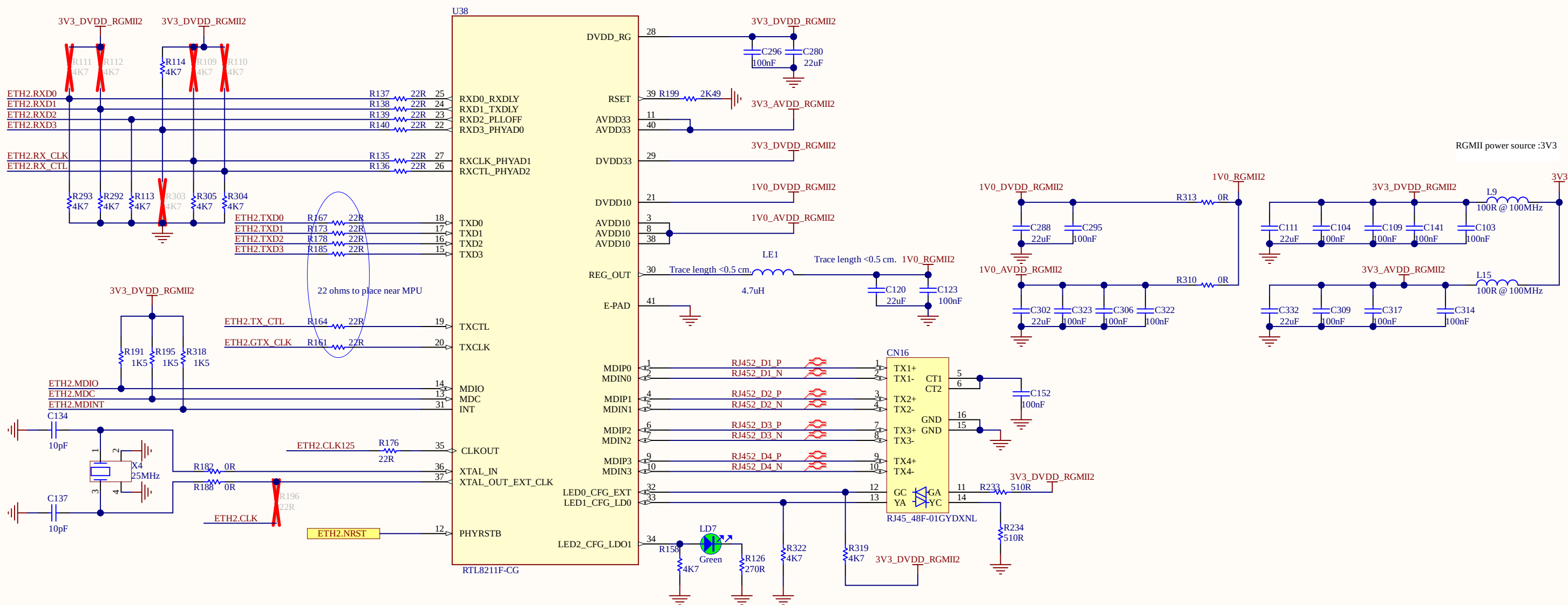
RGMII ETH2



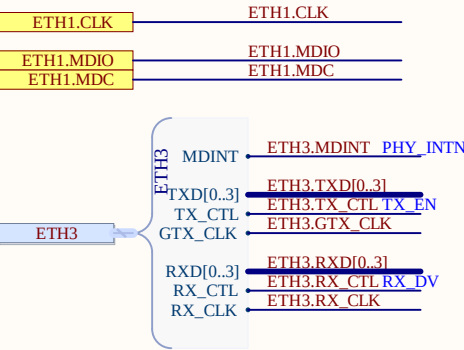
TXC / RXC : no 2ns delays

PHY Address :

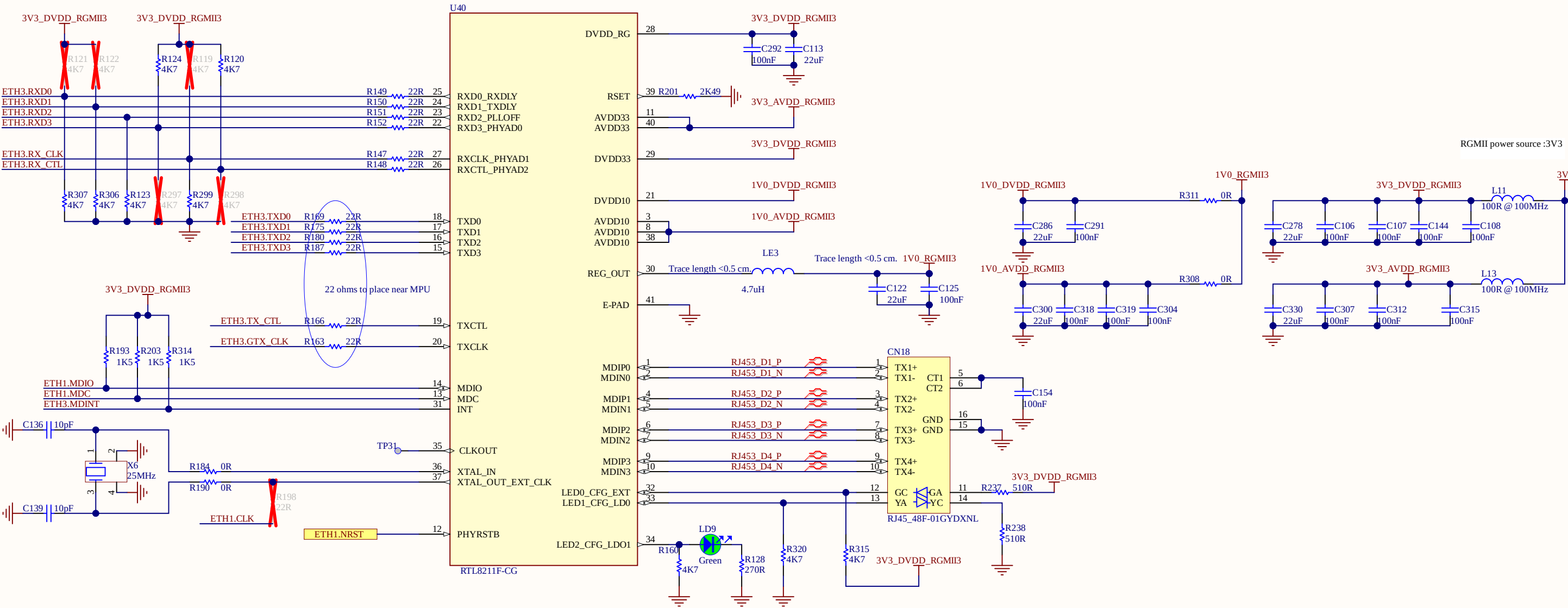
AD[2:0] : 001 (0x01) default

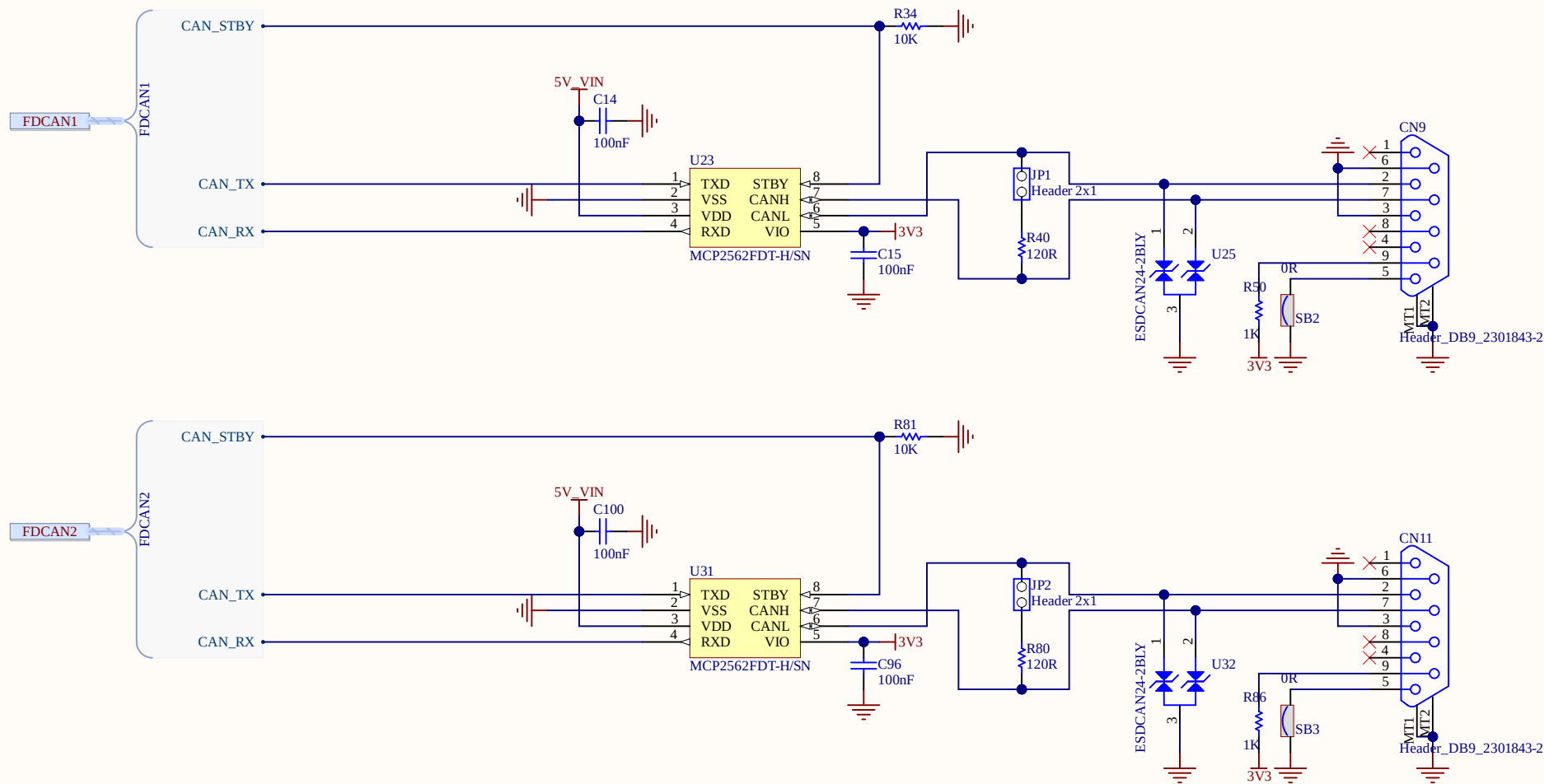


RGMII ETH3

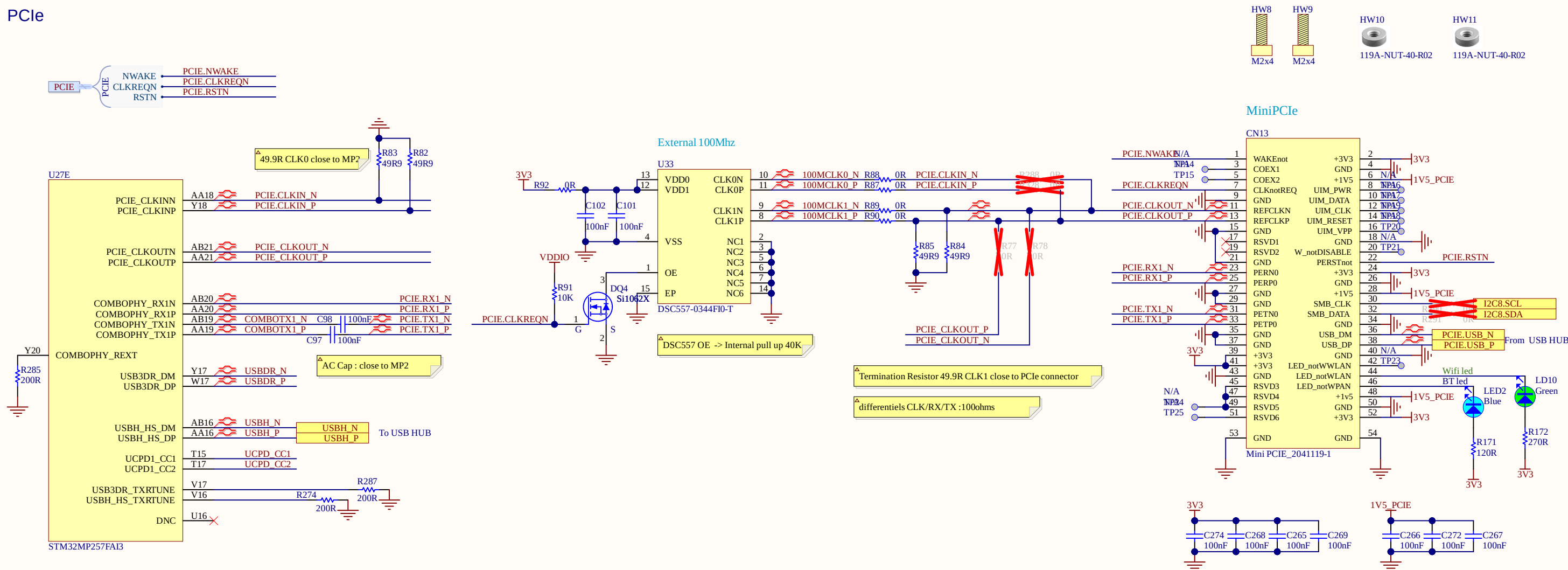


TXC / RXC : no 2ns delay
PHY Address :
AD[2:0] : 101 (0x05) default



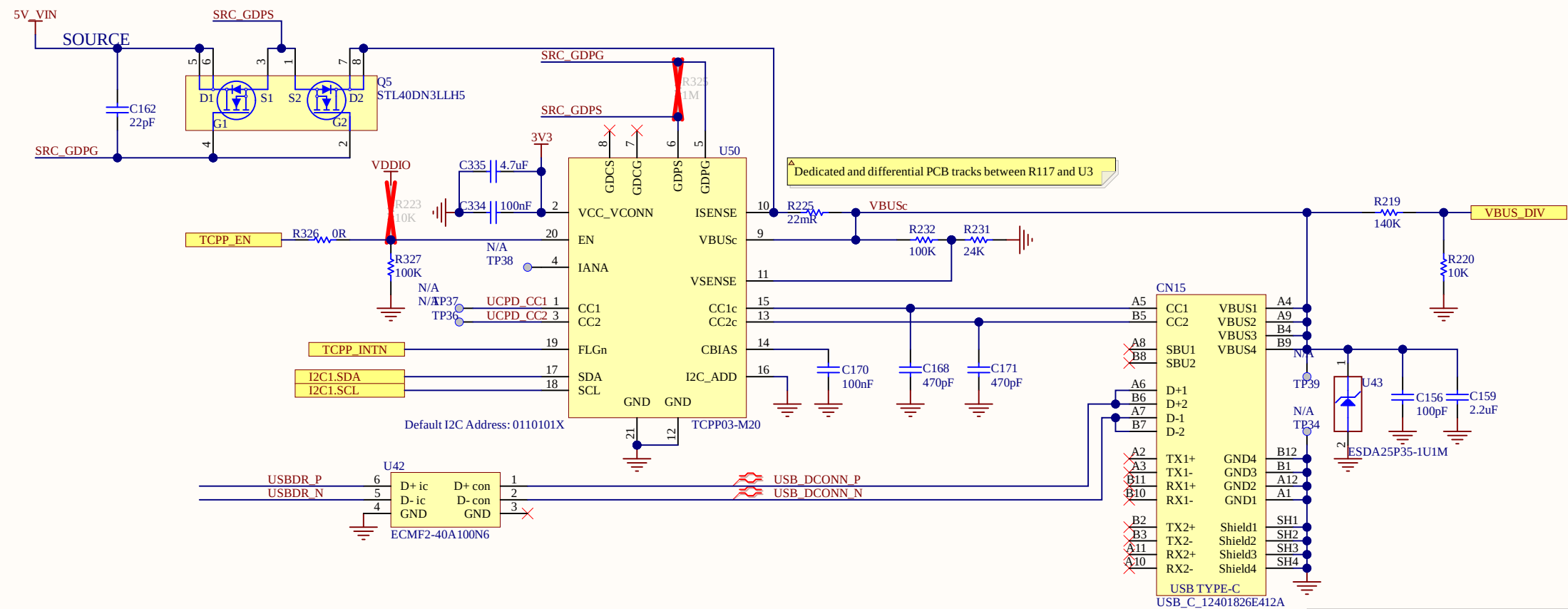


PCIe



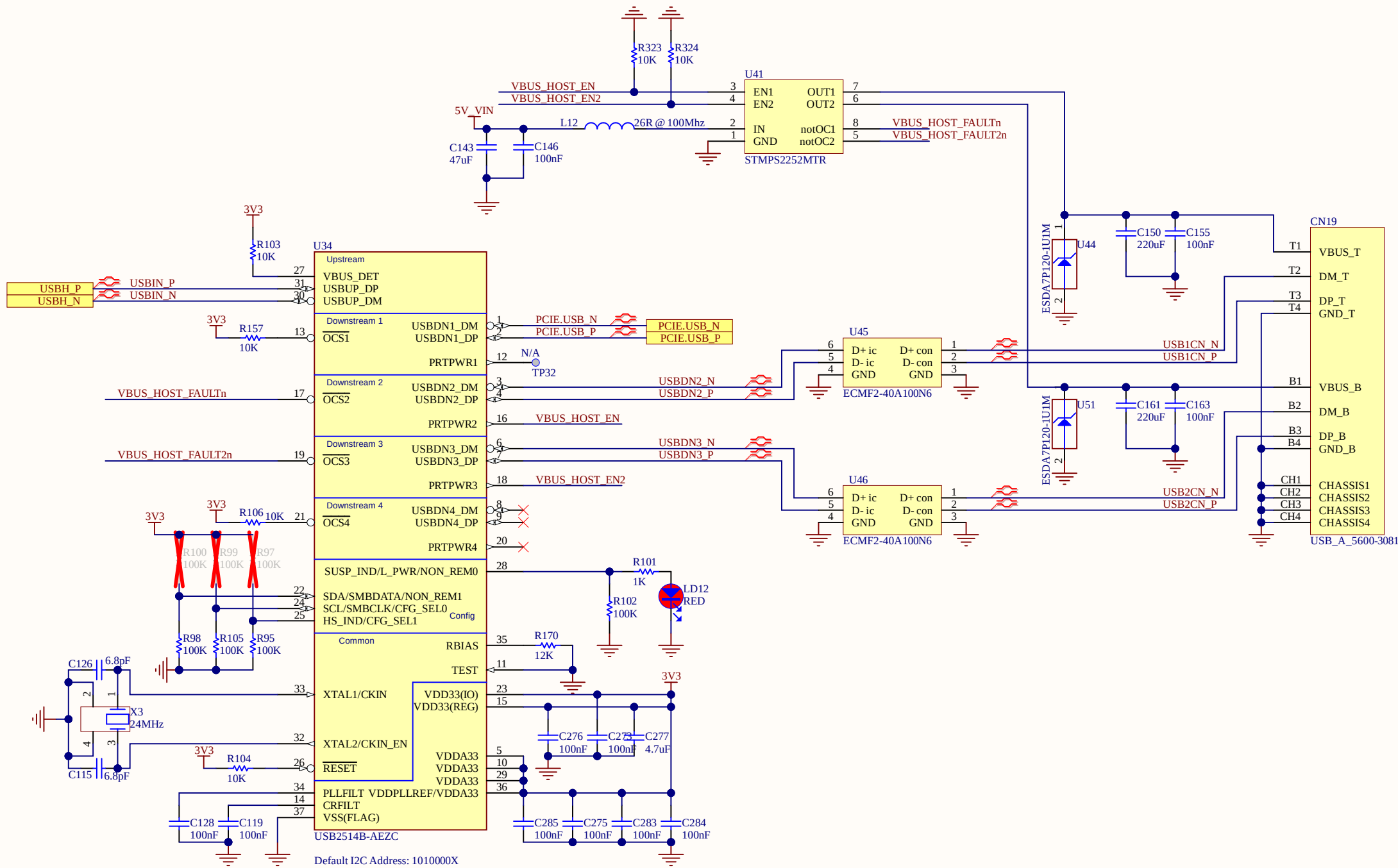
USB_DRD

Source/Sink(with sink current=0)

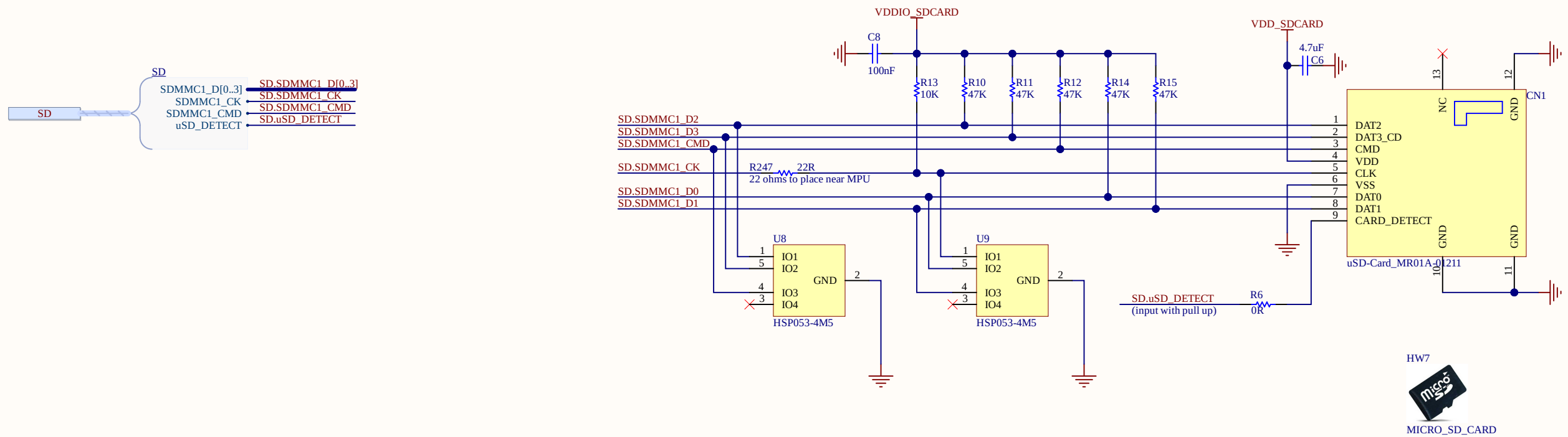


Title: USB_PCIE			
Project: STM32MP257F-EV1			
Variant: MP257F_X			
Revision: E-01		Reference: MB1936	
Size: A3	Date: 27-Nov-25	Sheet: 11 of 18	

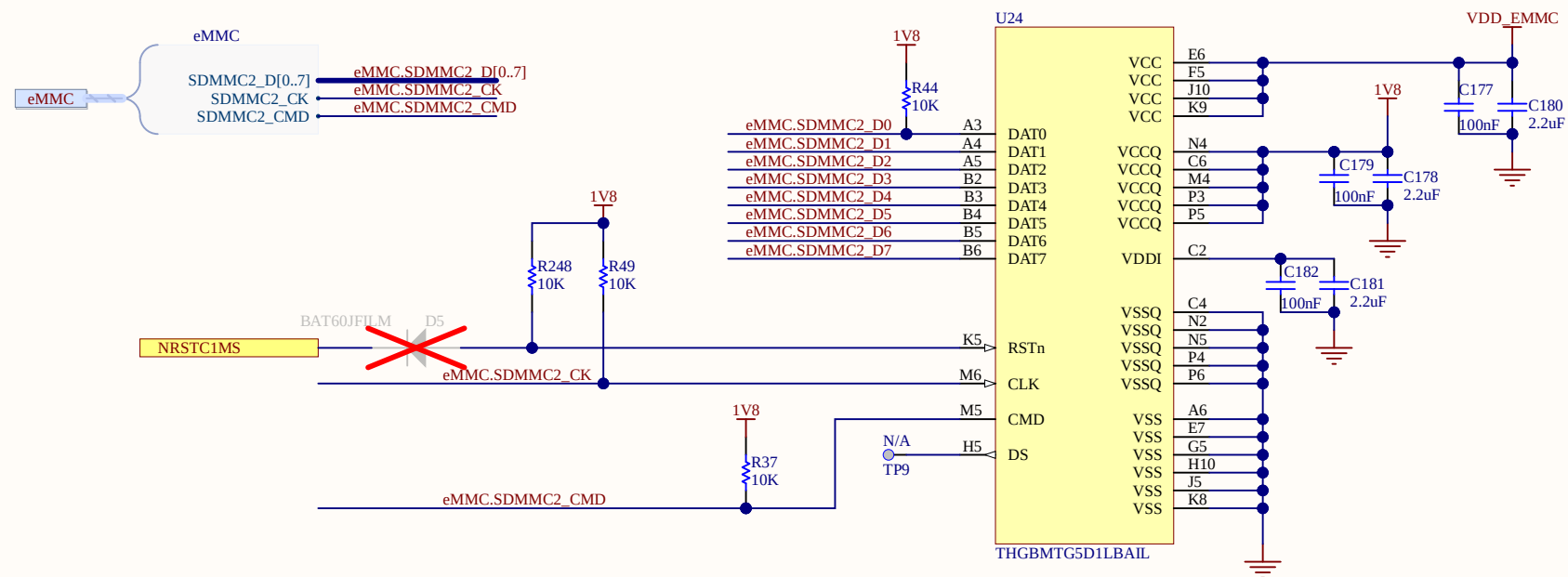
USB_HUB



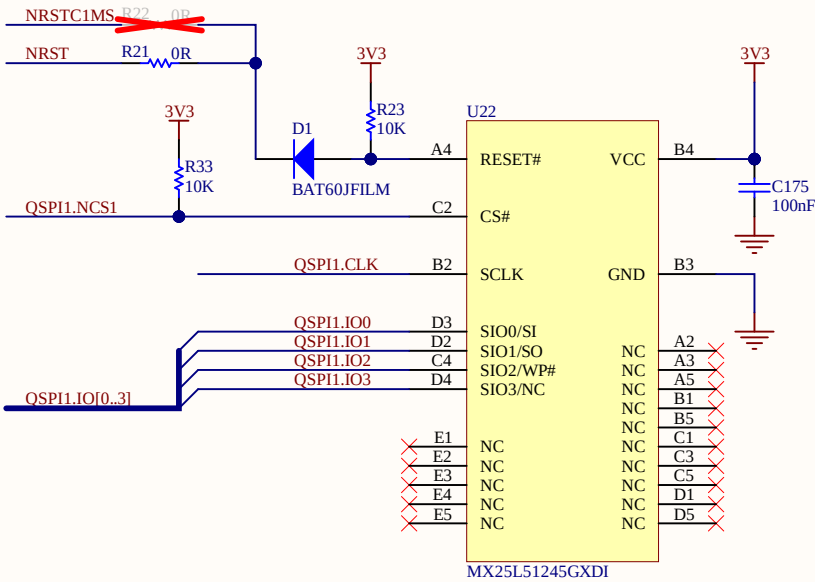
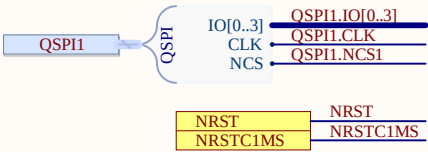
MICRO SD CARD



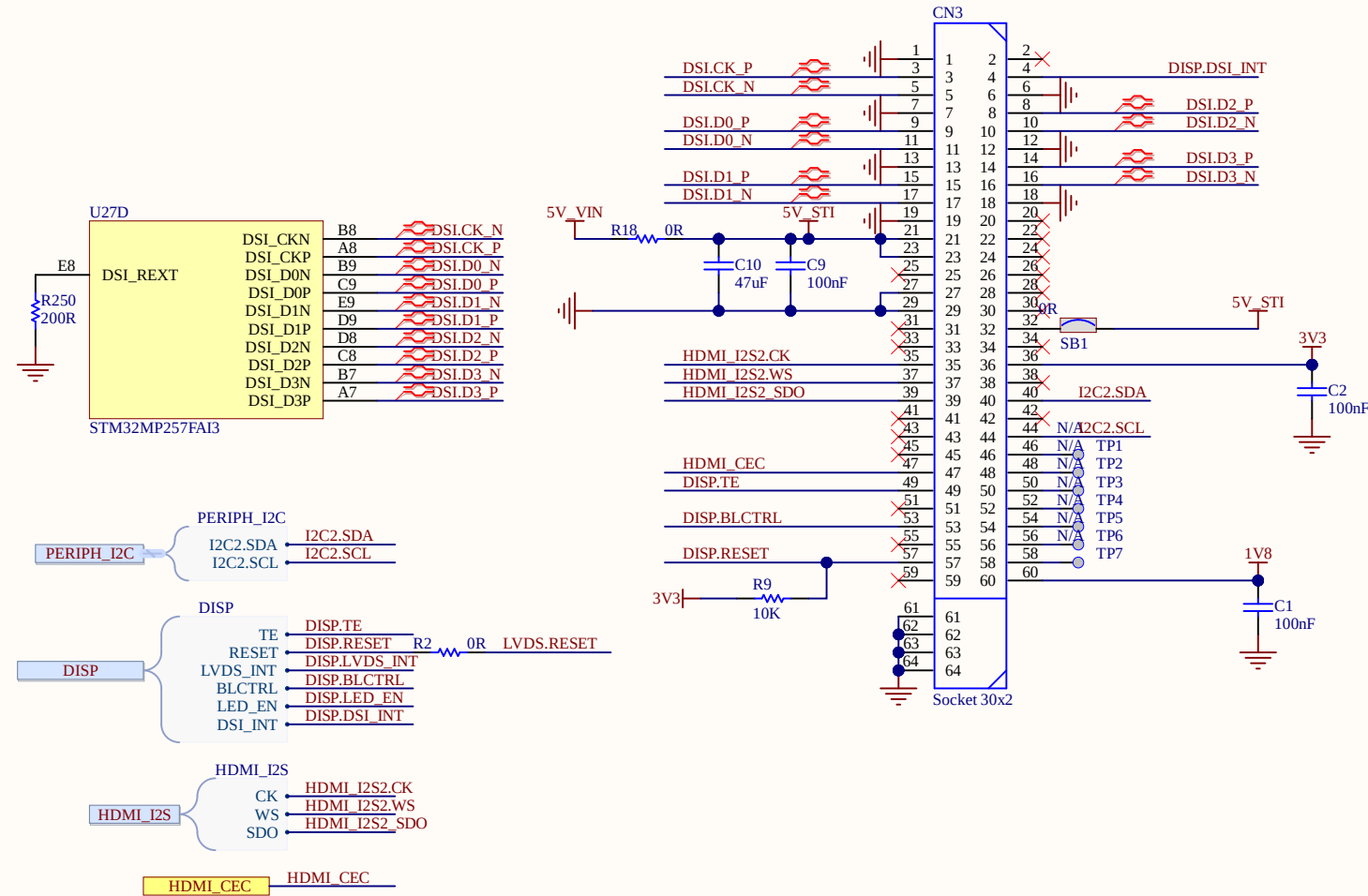
eMMC



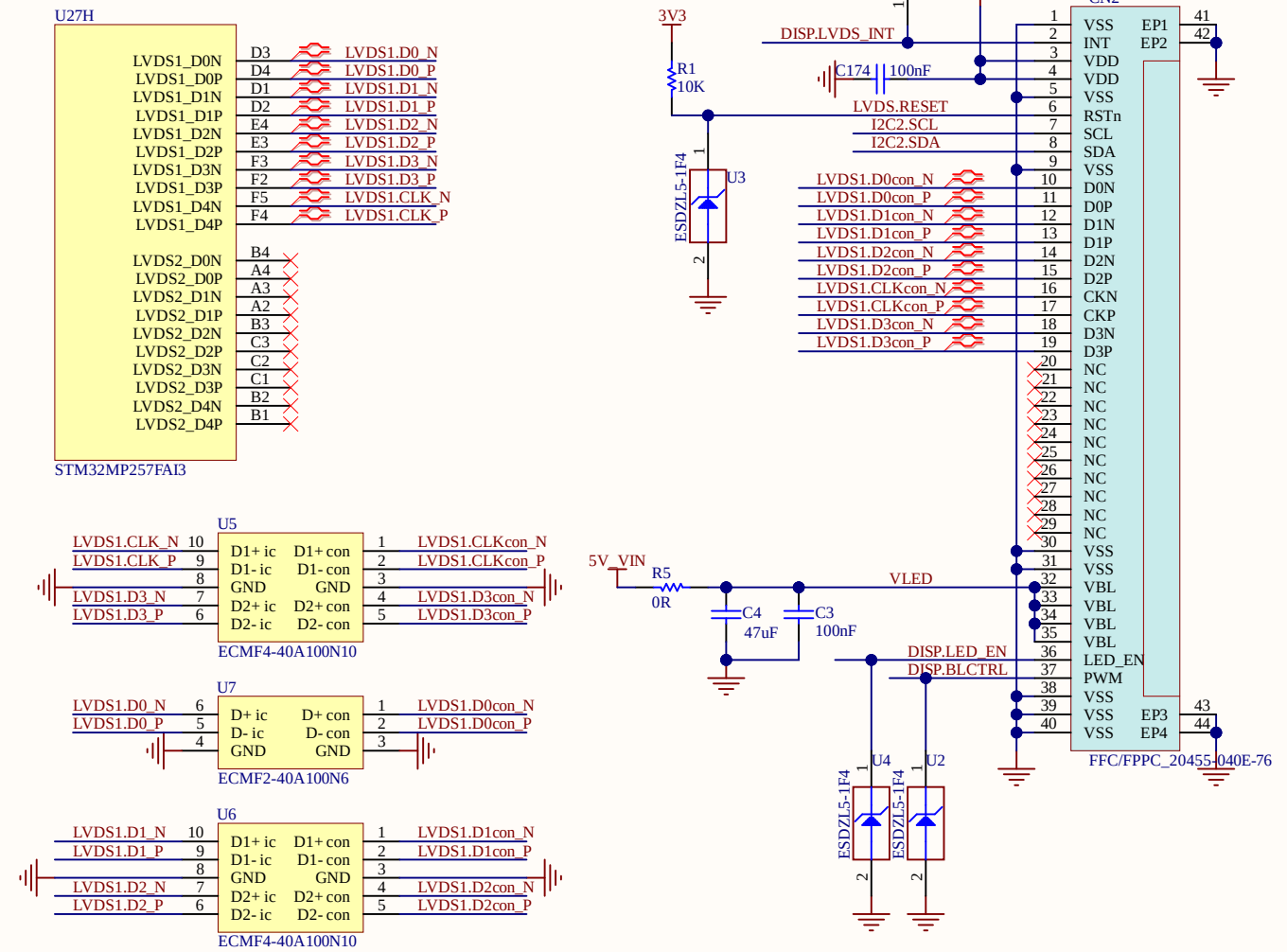
Quad SPI Flash



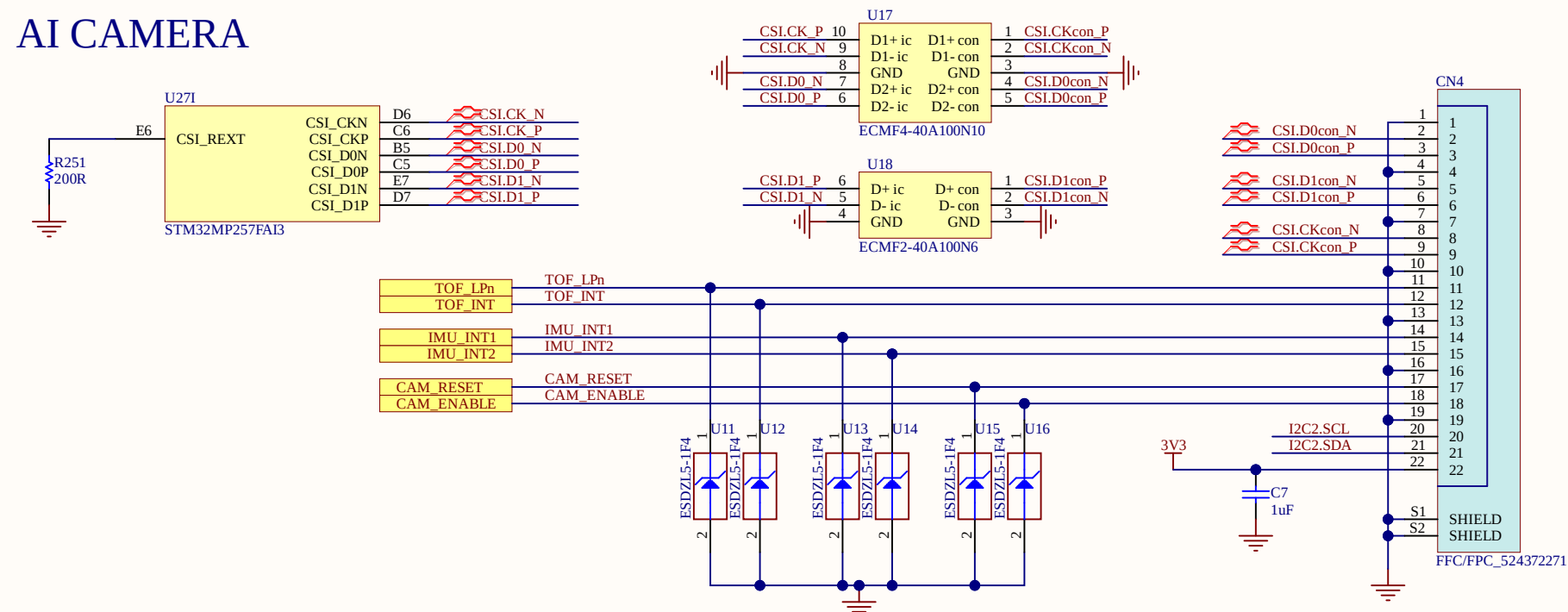
DSI - HDMI



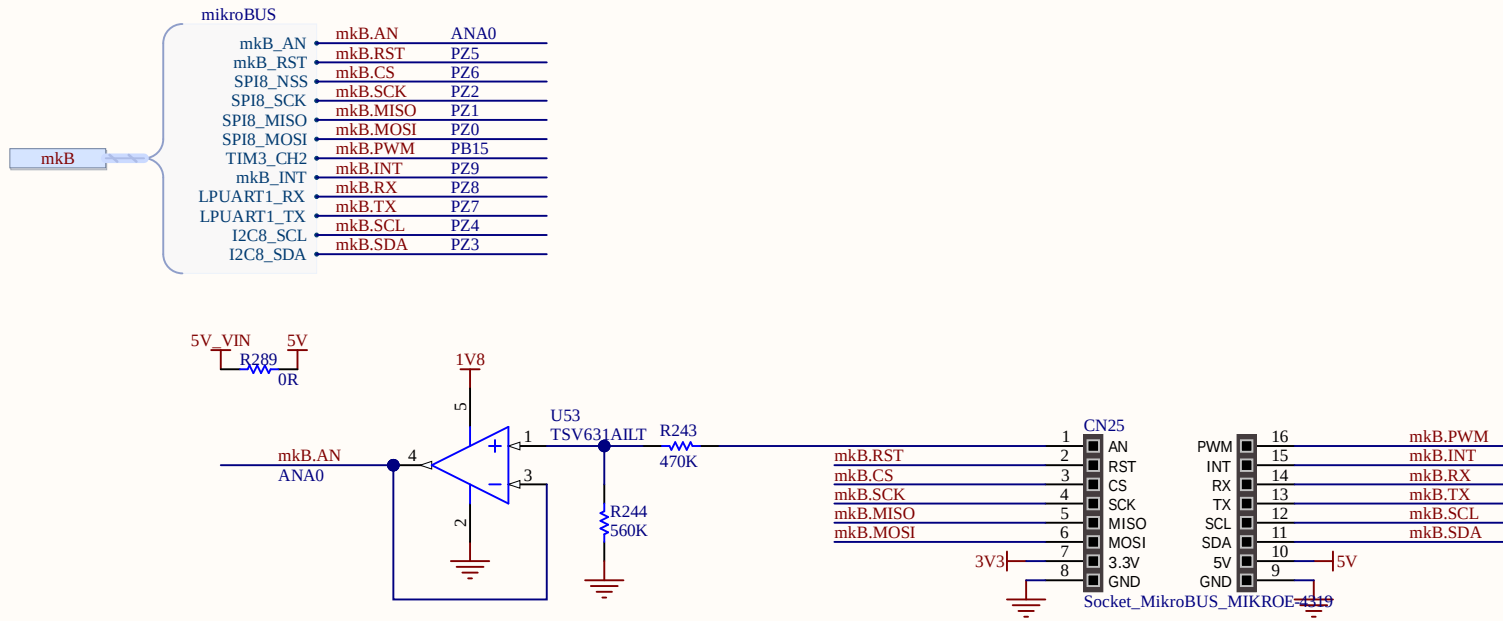
LVDS



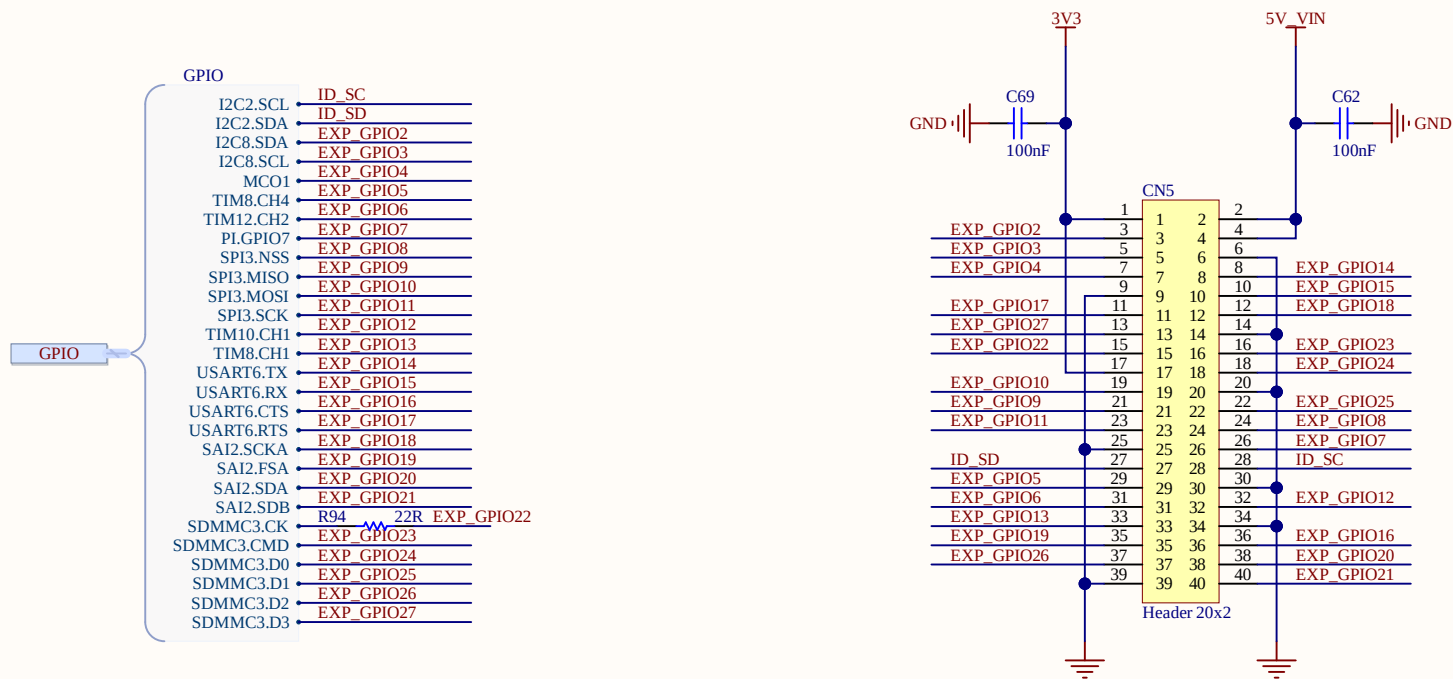
AI CAMERA



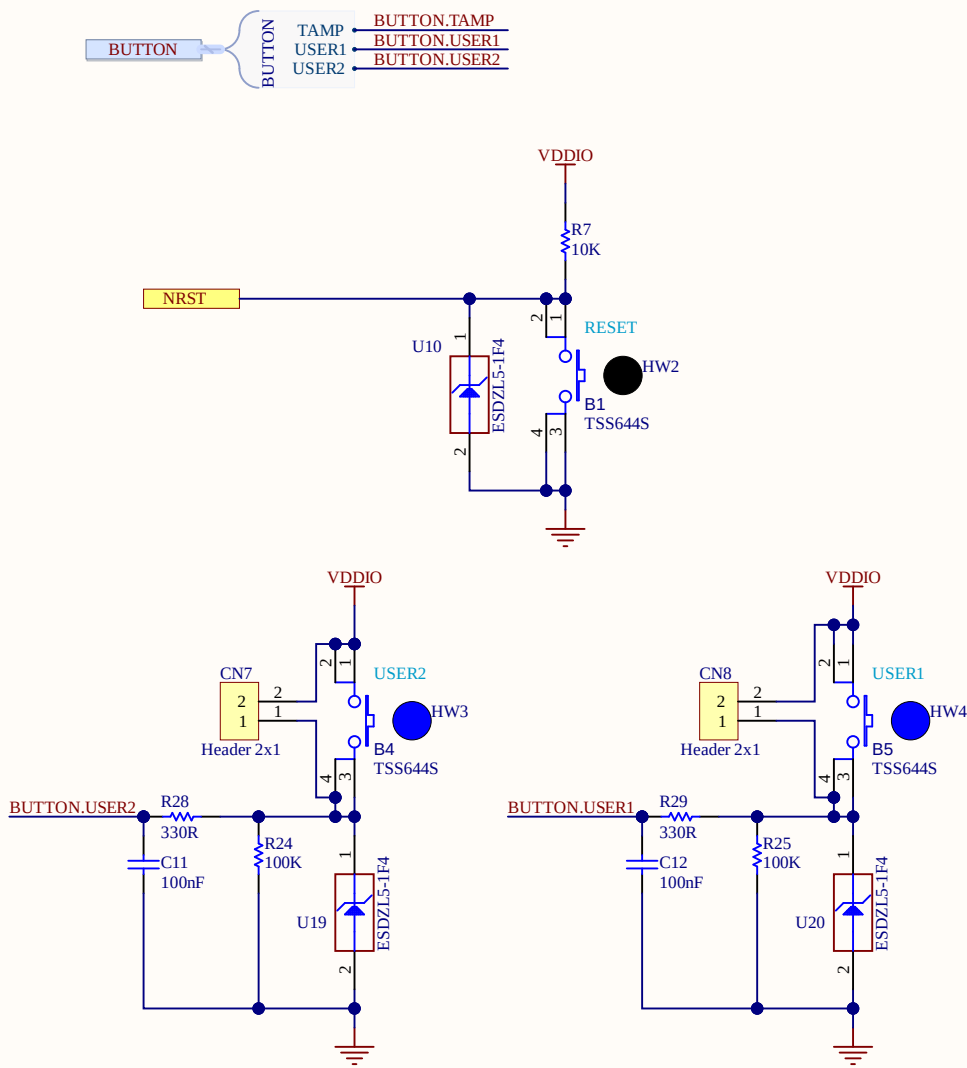
mikroBUS connector



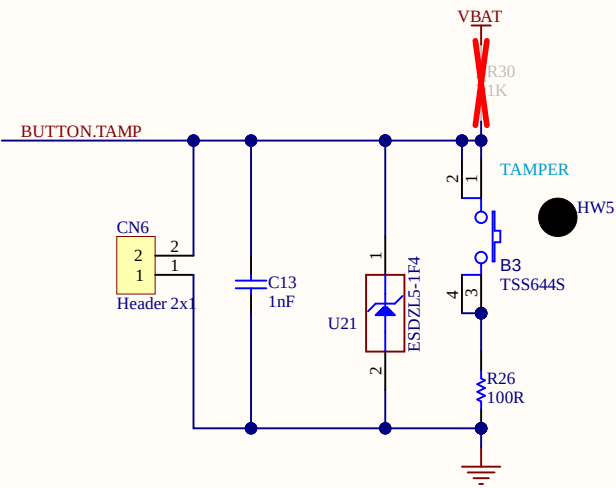
EXPANSION CONNECTOR



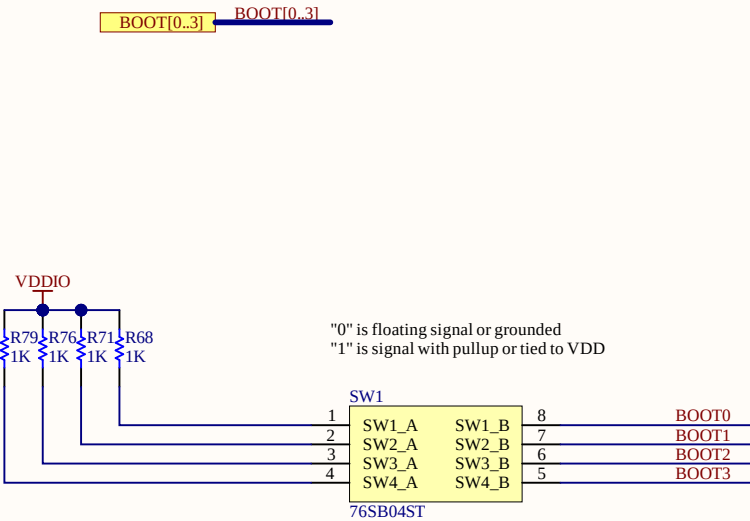
BUTTONS



TAMPER



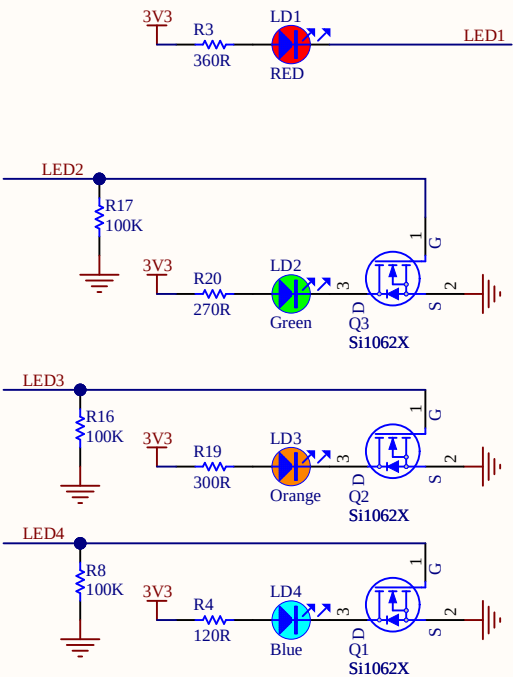
BOOT MODE



BOOT[3:0]	A35 master	M33 master
'b0000	UART/USB	UART/USB
'b0001	SD-Card	-
'b0010	eMMC	-
'b0011	Development	Development
'b0100	S-NOR	-
'b0101	-	-
'b0110	-	-
'b0111	-	SD-Card
'b1000	-	eMMC
'b1001	-	-
'b1010	-	-
'b1011	-	S-NOR
'b1100	Development	Development
'b1101	-	-
'b1110	-	-
'b1111	UART/USB	UART/USB

BOOT Sources : Simplified Table
For the complete Table : refer to datasheet

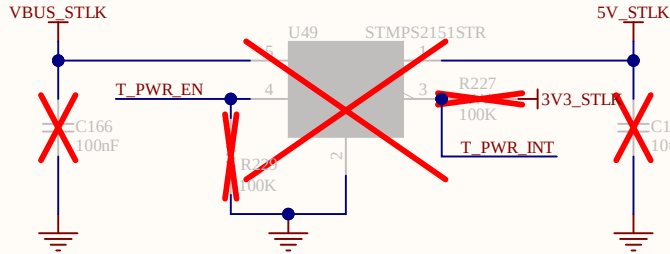
LED



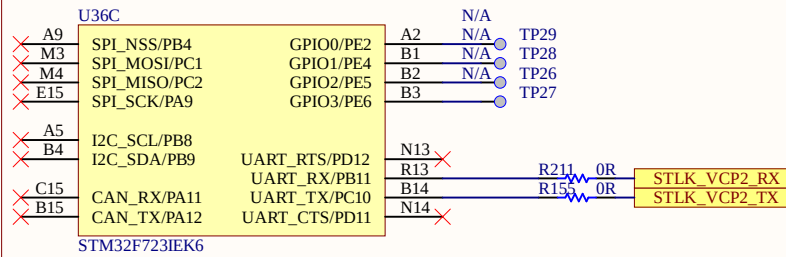
[illegible]

	T_PWR_SEL2/PD5	T_PWR_SEL1/PD4
PowerDefault.SNK (current limit: 550mA)	Hi-Z	Hi-Z
Power1.5.SNK (current limit: 1.66A)	Hi-Z	0
Power3.0.SNK (current limit: 3.2A)	0	0

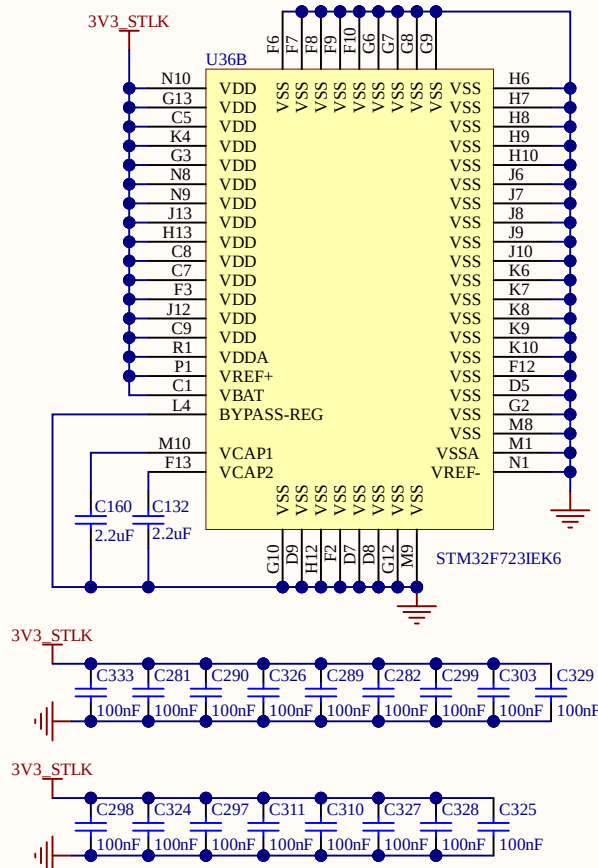
STMP52151STR is backup of the TPS259535DSG

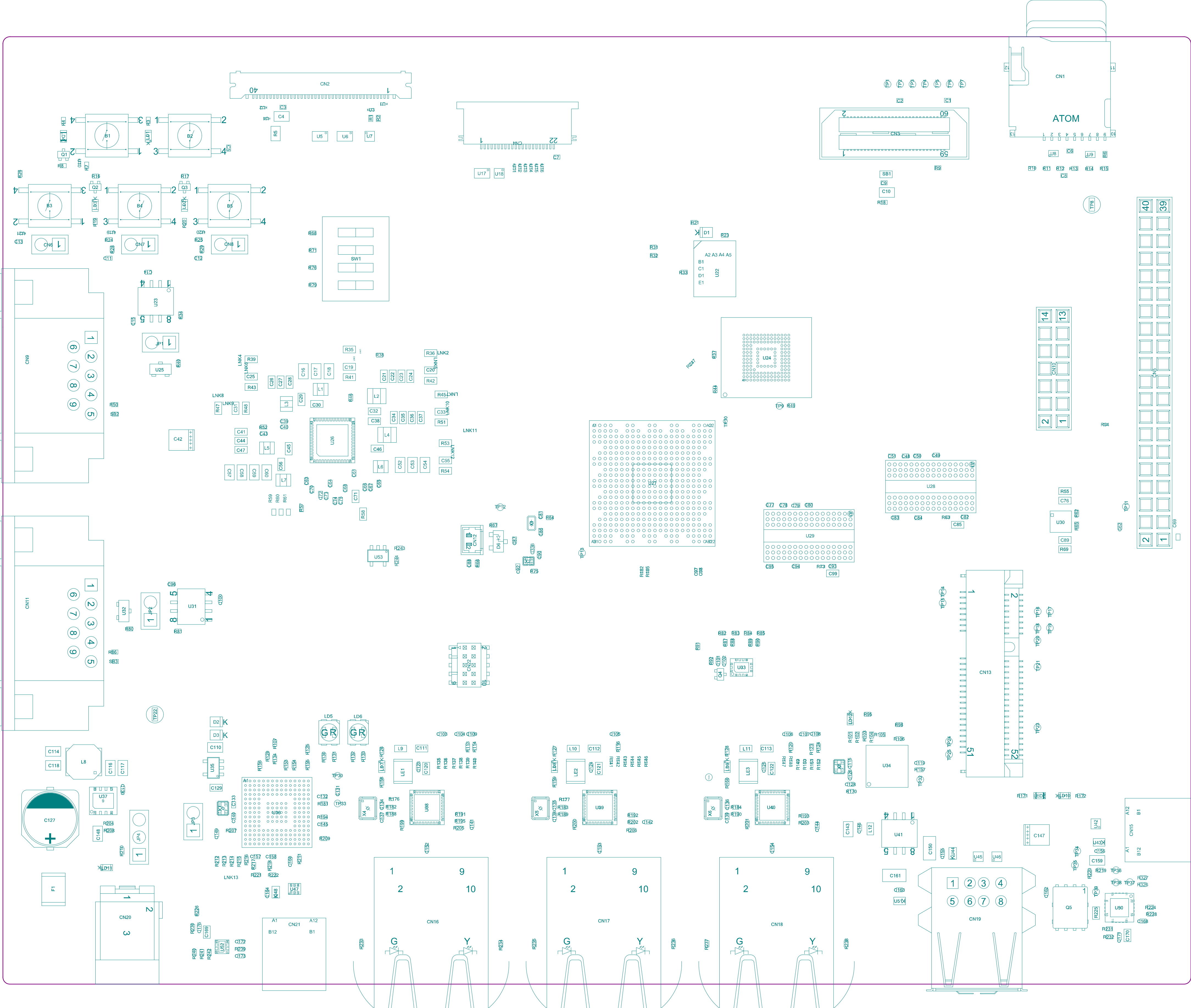


ST-LINKV3E Bridges (SPI/I2C/CAN/USART/GPIOs)



STLINK MCU POWER





Project: STM32MP257F-EV1

Layer: M14-Top Assembly

Variant: MP257F_X

Date: 27-Nov-25

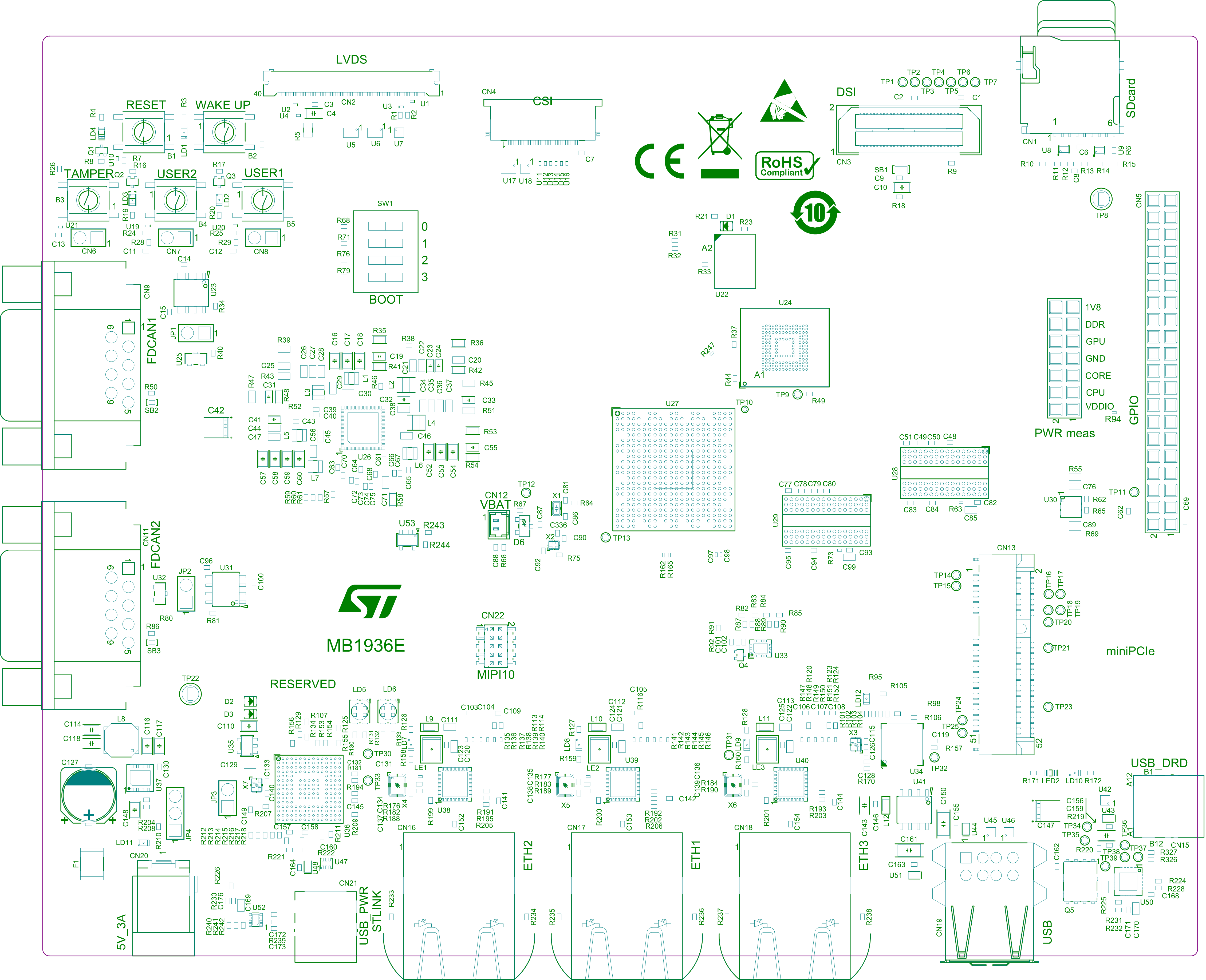
Gerber: .GM14

Ref: MB1936

Rev: E







Top Overlay

.GTO

C334 □
C335 □

C274 □ = C272 □ C267

C266 □ = C265

□ C268

C269 □

C276

C277

C283

C284

C285

C286

C287

C288

C289

C290

C291

C292

C293

C294

C295

C296

C297

C298

C299

C300

C301

C302

C303

C304

C305

C306

C307

C308

C309

C310

C311

C312

C313

C314

C315

C316

C317

C318

C319

C320

C321

C322

C323

C324

C325

C326

C327

C328

C329

C330

C331

C332

C333

C334

C335

C336

C337

C338

C339

C340

C341

C342

C343

C344

C345

C346

C347

C348

C349

C350

C351

C352

C353

C354

C355

C356

C357

C358

C359

C360

C361

C362

C363

C364

C365

C366

C367

C368

C369

C370

C371

C372

C373

C374

C375

C376

C377

C378

C379

C380

C381

C382

C383

C384

C385

C386

C387

C388

C389

C390

C391

C392

C393

C394

C395

C396

C397

C398

C399

C400

C401

C402

C403

C404

C405

C406

C407

C408

C409

C410

C411

C412

C413

C414

C415

C416

C417

C418

C419

C420

C421

C422

C423

C424

C425

C426

C427

C428

C429

C430

C431

C432

C433

C434

C435

C436

C437

C438

C439

C440

C441

C442

C443

C444

C445

C446

C447

C448

C449

C450

C451

C452

C453

C454

C455

C456

C457

C458

C459

C460

C461

C462

C463

C464

C465

C466

C467

C468

C469

C470

C471

C472

C473

C474

C475

C476

C477

C478

C479

C480

C481

C482

C483

C484

C485

C486

C487

C488

C489

C490

C491

C492

C493

C494

C495

C496

C497

C498

C499

C500

C501

C502

C503

C504

C505

C506

C507

C508

C509

C510

C511

C512

C513

C514

C515

C516

C517

C518

C519

C520

C521

C522

C523

C524

C525

C526

C527

C528

C529

C530

C531

C532

C533

C534

C535

C536

C537

C538

C539

C540

C541

C542

C543

C544

C545

C546

C547

C548

C549

C550

C551

C552

C553

C554

C555

C556

C557

C558

C559

C560

C561

C562

C563

C564

C565

C566

C567

C568

C569

C570

C571

C572

C573

C574

C575

C576

C577

C578

C579

C580

C581

C582

C583

C584

C585

C586

C587

C588

C589

C590

C591

C592

C593

C594

C595

C596

C597

C598

C599

C600

C601

C602

C603

C604

C605

C606

C607

C608

C609

C610

C611

C612

C613

C614

C615

C616

C617

C618